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W. REINHART

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LOCK

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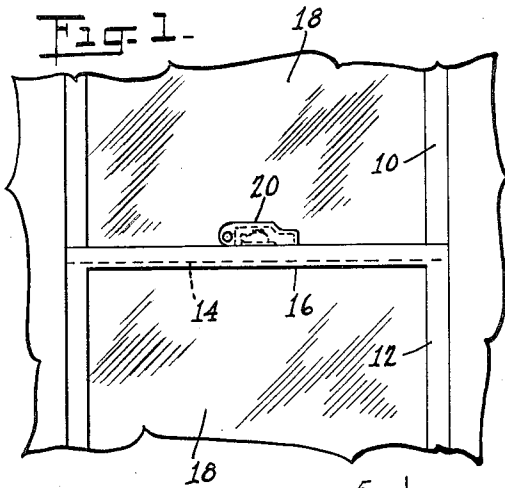


Fig. 5.

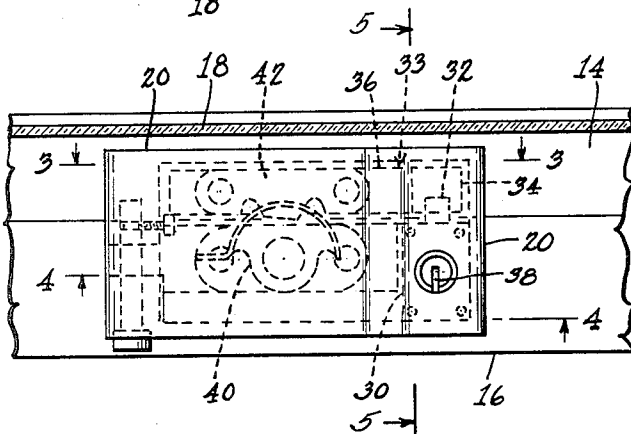
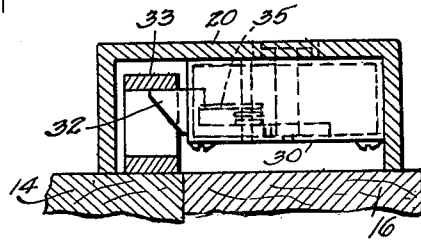


Fig. 2.

Fig. 3.

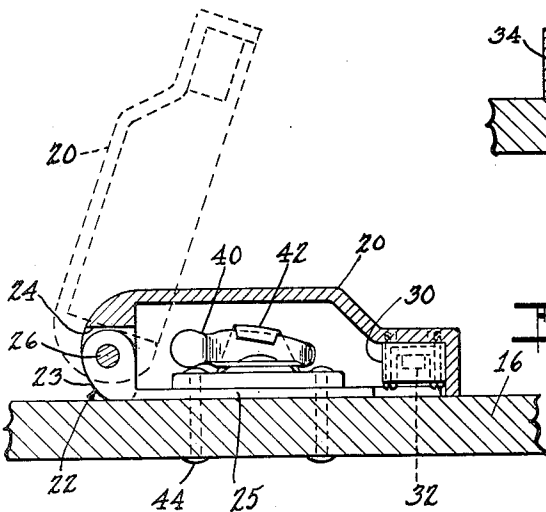
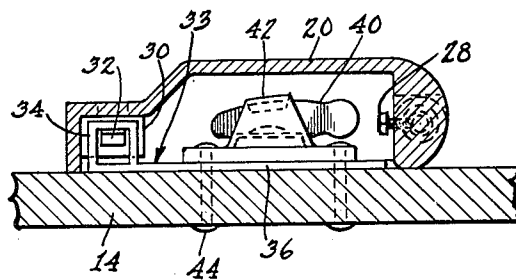


Fig. 4.

INVENTOR.
Walther Reinhart

BY
Eric B. Prime
ATTORNEY.

UNITED STATES PATENT OFFICE

1,956,731

LOCK

Walther Reinhart, Chicago, Ill.

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4 Claims. (Cl. 70-14)

My invention relates to improvements in locks for windows and the like.

An object of my invention is to provide a lock for windows and the like which is adapted for use in combination with the standard window lock or catch, which will prevent a window from being pried open or from being opened from the exterior of the window by an outsider breaking the glass and releasing the catch.

A further object is to provide a novel lock for windows which may be locked with a key in order that the window may not be opened by anyone except the one having the key.

A further object is to provide novel means for covering the conventional window lock and for locking the cover in the closed position in order that the window lock cannot be tampered with.

Another object is to provide novel means whereby windows may be quickly and securely locked and which enables one to determine at a glance whether the windows are locked.

A further object is to provide a lock for windows which is simple in construction and which may be quickly and easily installed.

In the accompanying drawing:

Figure 1 is a fragmentary elevational view of windows showing my invention connected therewith;

Figure 2 is an enlarged top plan view of the structure shown in Figure 1;

Figure 3 is a sectional view taken along the line 3-3 of Figure 2;

Figure 4 is a sectional view taken along the line 4-4 of Figure 2; and

Figure 5 is an enlarged sectional detail view taken substantially along the line 5-5 of Figure 2.

In the embodiment selected to illustrate my invention, I provide a top window sash 10 and a bottom window sash 12 which are conventional as shown in Figure 1.

The top sash 10 is provided with a bottom cross rail 14 and the bottom sash 12 is provided with a top cross rail 16. When the windows are in their closed positions, the cross rails 14 and 16 are positioned side by side so that the top surfaces thereof will be positioned substantially in the same plane. Window panes 18 are positioned in the sashes in the conventional manner adjacent the outer surfaces of the sashes. Either one or both of the windows may be slidable in the window frame 19.

A cover member 20 is positioned on the cross rails 14 and 16 as shown in Figures 2, 3 and 4, and is hingedly connected with the top cross rail 16 by means of a hinge member 22. The

hinge member 22 comprises a hinge portion 23 and a base portion 25. The hinge portion 23 is receivable in an opening 24 in the cover member 20, and is connected with the cover member by means of a pin 26 which extends through openings in the cover member and the hinge portion 23. The cover member is countersunk as shown in Figure 2 for receiving the head of the pin 26. The pin is retained in position by a set screw 28 which extends through a threaded opening in the cover member and into a circumferential groove in the pin.

The cover member is provided with a lock 30 positioned on the inner side thereof and connected therewith by any suitable means such as screws. The lock 30 is provided with a lock bolt 32. A keeper 33 is connected with the cross rail 14 as shown in Figures 2 and 3 and comprises a loop portion 34 and a base portion 36.

The keeper is positioned so that when the windows are closed and the cover member is down as shown in Figures 1 to 4 inclusive, the lock bolt will extend within the loop portion for locking the cover member to the top window sash thereby preventing either of the sashes from being moved.

The lock 30 has a projecting portion which extends through an opening in the cover member and is provided with a key opening 38 therein for receiving a key whereby the lock bolt may be retracted from the keeper for disconnecting the cover member from the keeper member, at which time the cover member may be moved to the dotted line position shown in Figure 4.

The lock bolt 32 which is beveled, as shown in Figure 5, is held normally yieldably projected by a spring 35, and is retractable from the keeper 33 by the key. The key-operated lock mechanism may be of any suitable conventional type.

On referring to Figures 2, 3 and 4 it will be noted that the conventional fastening means for securing the windows is employed and comprises a fastening member 40 and a retaining member 42 which are mounted on the base portions 25 and 36 respectively of the hinge member and keeper.

The fastening member 40 and the base portion 25 of the hinge member are fixedly connected with the cross rail 16 by a common fastening means such as rivets 44 and the retaining member 42 and the base portion 36 of the keeper are connected with the cross rail 14 by similar connecting rivets 44.

In the drawing the fastening member 40 is shown connected with the retaining member 42 and the lock bolt 32 is in engagement with the

loop portion 34 of the keeper at which time the windows are securely locked in position.

When it is desired to unlock the windows, the key is inserted in the opening 38 for withdrawing the lock bolt 32 from the keeper 33 at which time the cover member may be swung upwardly to its dotted line position as shown in Figure 4. The fastening member 40 may then be moved out of engagement with the retaining member 42 at which time the windows may be opened.

Thus it will be seen that when the windows are locked they can only be opened by one having the key. The construction is sufficiently rugged so that the windows cannot easily be pried open and if the glass is broken the windows cannot be unlocked by a person reaching through the window unless the person has a key. The cover member is preferably constructed of a ductile material such as brass in order that it may not be broken by hammering thereon.

While I have illustrated and described my invention as being adapted for use with windows, it will be understood that it may also be readily adapted for use with analogous items such as doors.

Without further elaboration, it is believed that the foregoing fully explains the invention so that the same may be readily adapted for use under various conditions.

I claim:

1. In combination, a hinge member mounted on one of a pair of offset window sashes, a keeper member mounted on the other offset window sash, a fastening element mounted on the hinge member and a fastening element mounted on the keeper member, means for connecting the fastening elements with the hinge member and keeper member and their respective sashes, said fastening elements being adapted for mutual engagement for fastening the sashes to each other, a cover member pivotally connected with the hinge member and adapted for covering the fastening elements, the hinge member and the keeper member, and a lock positioned on the inner side of the cover member and connected therewith, said lock being provided with a lock bolt adapted for engagement with the keeper member for retaining the cover member in its covering position.

2. A lock mechanism comprising a hinge member mounted on one of a pair of relatively movable members, a keeper member mounted on the

other member, said keeper member and hinge member being positioned side by side and substantially parallel with each other when the movable members are disposed in adjacent positions, a cover member hingedly connected with the hinge member and provided with a recess for receiving the hinge member and the keeper member, and a lock disposed in the recess and connected with the cover member, said lock being provided with a key retractable lock bolt adapted for engagement with the keeper member for connecting the cover member therewith when the cover member is positioned for covering said hinge member and keeper member.

3. A lock mechanism comprising a hinge member mounted on one of a pair of relatively movable members, a keeper member mounted on the other member, fastening elements mounted on the hinge and keeper members and adapted for mutual engagement when the relatively movable members are disposed in adjacent positions, a cover member hingedly connected with the hinge member and provided with a recess for receiving the fastening elements, the hinge member, and the keeper member, and a lock connected with the cover member and provided with a lock bolt adapted for engagement with the keeper member for connecting the cover member with the keeper member.

4. A lock mechanism comprising a hinge element mounted on one of a pair of relatively movable members and provided with an opening therethrough, a keeper element mounted on the other member, a cover member provided with an opening therein in alignment with the opening in the hinge element, a pin extending through the openings for hingedly connecting the cover member with the hinge element, said pin being provided with a recess therein, a pin retaining element connected with the cover member and extending within the recess in the pin for fixedly positioning the pin with respect to the cover member and hinge element, said cover member being provided with a recess therein for receiving the hinge element and the keeper element, and a lock disposed in the recess in the cover member and connected with the cover member, said lock being provided with a lock bolt adapted for engagement with the keeper element for connecting the cover member with the keeper element.

WALTHER REINHART.

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