(No Model.)

J. R. HUSSEY.

SASH LOCK.

No. 350,678. Patented Oct. 12, 1886.

Fig. 1.

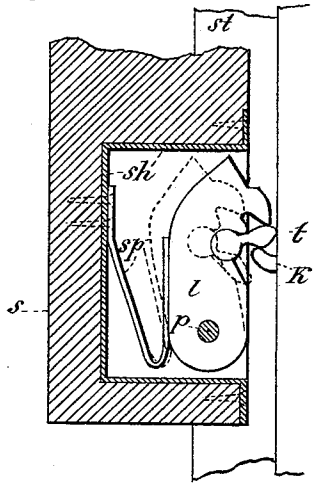


Fig. 2.

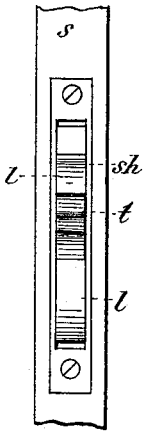


Fig. 3.

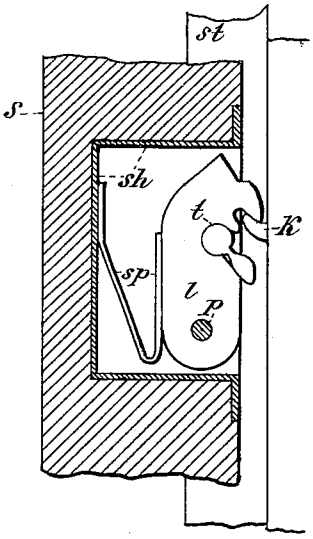


Fig. 4.

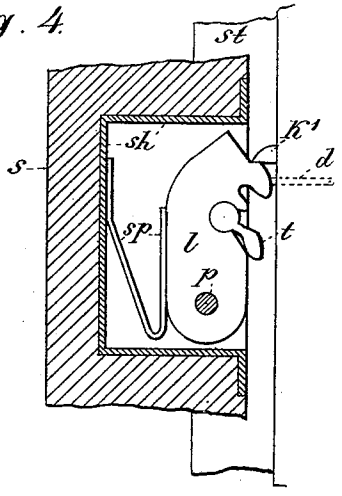
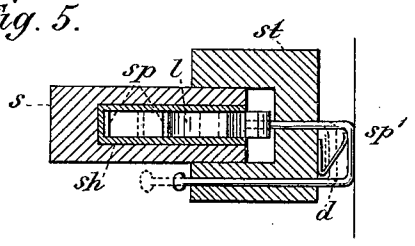


Fig. 5.



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SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 350,678, dated October 12, 1886.

Application filed July 14, 1886. Serial No. 207,984. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. HUSSEY, a resident of Indianapolis, Marion county, Indiana, have made certain new and useful Improvements in Sash-Locks, a description of which is set forth in the following specification, reference being made to the accompanying drawings, in the several figures of which like letters represent like parts.

My invention relates to an improvement in devices for locking sashes; and it consists of a latch pivoted in a shell which is intended to be let into the edge of the sash or casing, and constructed and operating in the manner hereinafter described.

In the drawings, Figure 1 represents a side view of my device, one side of the shell being removed, the full lines indicating the position of the latch and trigger when the latter has been lifted over the stop or catch, the dotted lines indicating the position of the parts when the sash is pulled downward upon the catch for lowering it. Fig. 2 is an edgewise view of the device, showing the manner in which the lock and its shell is let into the sash-rail. Fig. 3 is a similar view to Fig. 1, except that the parts are shown in position when the sash is raised and the lip of the latch is engaged with the catch on the casing. Fig. 4 is a similar view to Fig. 3, except that it shows the position of the parts when the sash is fully down and the lip of the latch is locked under the lowest stop. Fig. 5 is a cross-section of the parts just above the top of the latch, showing the position of the unlocking device.

In detail, *sh* is a shell or case, in which a latch, *l*, is set upon a pivot, *p*, either formed integrally with or let into the sides of the casing, and *sp* is a spring fastened in the rear of the latch and bearing, one part against the back of the shell and the other against the back of the latch. This latch *l* has a projecting lip which is intended to engage with a catch, *k*, fixed on the side of the casing; and *t* is a trigger, which is pivoted in the body of the latch, so as to move freely in either direction—up or down—when desired.

My device acts as follows: If the sash is down, by shoving it up the upper and rounded side of the lip of the latch will strike the reversely-rounded under side of the catch *k*, and the latch will be pushed back on the pivot *p*, so as to allow the latch to pass by the catch *k*, and as soon as it has passed it the pressure of the spring will throw the latch forward, it moving freely on its pivot, and the lip of the latch will lock over the catch *k* in the manner shown in Fig. 3, and the sash will be held securely in its lifted position. Any number of these catches may be set along the casing that are desired; but in a small window—such as that of a railway-car—one or two of these stops will be sufficient. In a larger window three or four may be used. The locking device is let into the edge of the window-sash in the manner shown in Fig. 2, so that only the lip of the latch and the lip of the trigger project beyond the line of the sash, as shown in Fig. 3. Now, if it is desired to let the window down, the sash is lifted until the trigger passes over the catch *k*. The upper side of this trigger is beveled or rounded off, so as to slip by the catch, and the pressure of the spring will allow it to yield enough to go by readily. When this trigger has passed over the catch *k*, it will rest upon the catch and in contact with it, in the manner shown in Fig. 1, and then by pressing down upon the sash the trigger *t*, whose upper side presses against the lip of the latch, and whose under side rests upon the top of the catch *k*, will push the latch *l* backward, it rotating upon its pivot until its lip has passed within the shell out of the way, in the position shown in the dotted lines in Fig. 1, and the sash may then be pressed down past the catch *k* and closed. It will be observed that when the trigger *t* passes over the catch *k* the force of the spring *sp* will crowd out the latch and throw the trigger over upon the top of the catch *k*, as shown in Fig. 1, and in that manner it becomes a sort of intermediate lever to push the latch out of the way of the catch when the window is to be closed. Near the bottom of the window, in the side of the casing, is fixed a stop of a little different shape. (Marked *k'* in Fig. 4.) Just over the lip of the latch a small square shoulder is formed, and when the sash is let down and reaches the catch *k'*, the top being rounded, the lip of the latch will pass down over it, and as the sash reaches the limit of its downward movement the force of the spring will throw the latch forward, and the squared shoulder of the latch

will pass directly under the flat bottom of the stop *k'*, locking it in position and preventing it from being raised until unlocked.

The unlocking device is shown in Fig. 5, and is marked *d*. The end of this is shown in Fig. 4 pressing against the front of the lip of the latch, and the dotted lines beyond indicate the line of its position in the casing. It consists simply of a U-shaped wire, one arm shorter than the other, the bend of the U resting against a part of the casing, the short arm extending through the casing in which the sash slides, so as to come in contact with the lip of the latch when the window is closed. A small spring, *sp'*, is set in between the back of the casing *st* and the bend of the U-shaped wire. The wire *d* is provided with a small knob and extends through the casing *st*, as shown in Fig. 5. By pulling on this knob the U-shaped wire is drawn forward, and its short arm in this movement pushes back the lip of the latch, freeing it from engagement with the stop *k'*, and the sash may then be raised.

This device may be used on a vertically-sliding door or cover of a cabinet, and, indeed, is applicable to a variety of other articles; but is especially appropriate for car-windows, as it costs little to make it, it is let into the sash completely out of the way, and will not interfere with the finish of the sash, and takes up no space on the outside. If desired, the shell, which is preferably made of iron, may be dispensed with, and the latch may be put directly in an opening in the wood and the springs set in behind it; but as it costs so little to make the entire device the shell is preferable, as it inclos s all the parts and prevents them from separating while being handled or put in place.

What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. The sash-lock composed of a latch, *l*, pivoted in an opening in the sash and having an upper lip to engage with a catch fixed in the casing, and a trigger, *t*, pivoted in the body of the latch, substantially as described.

2. A locking device composed of a pivoted latch, *l*, having a projecting lip to engage with a catch on the window-casing and carrying a trigger, *t*, pivoted in the body of the latch, a pressure-spring, *sp*, secured between the side of the casing and the back of the latch, a sash, *s*, into which the locking device is let, and a catch, *k*, fastened to the window-casing, all combined substantially as described.

3. A locking device composed of a pivoted latch, *l*, having a projecting lip to its upper portion, squared to form a shoulder carrying a trigger, *t*, pivoted in the body of the latch, a pressure-spring, *sp*, back of the latch, one or more upper catches, *k*, to engage with the latch to hold the sash, when raised, a lower stop, *k'*, having a rounded upper and a flat under side, to engage with the squared shoulder of the latch to lock the same securely when the sash is closed, with means for unlocking the same, all combined substantially as described.

In witness whereof I have hereunto set my hand.

JOHN R. HUSSEY.

Witnesses:
C. P. JACOBS,
HATTIE MURRY.