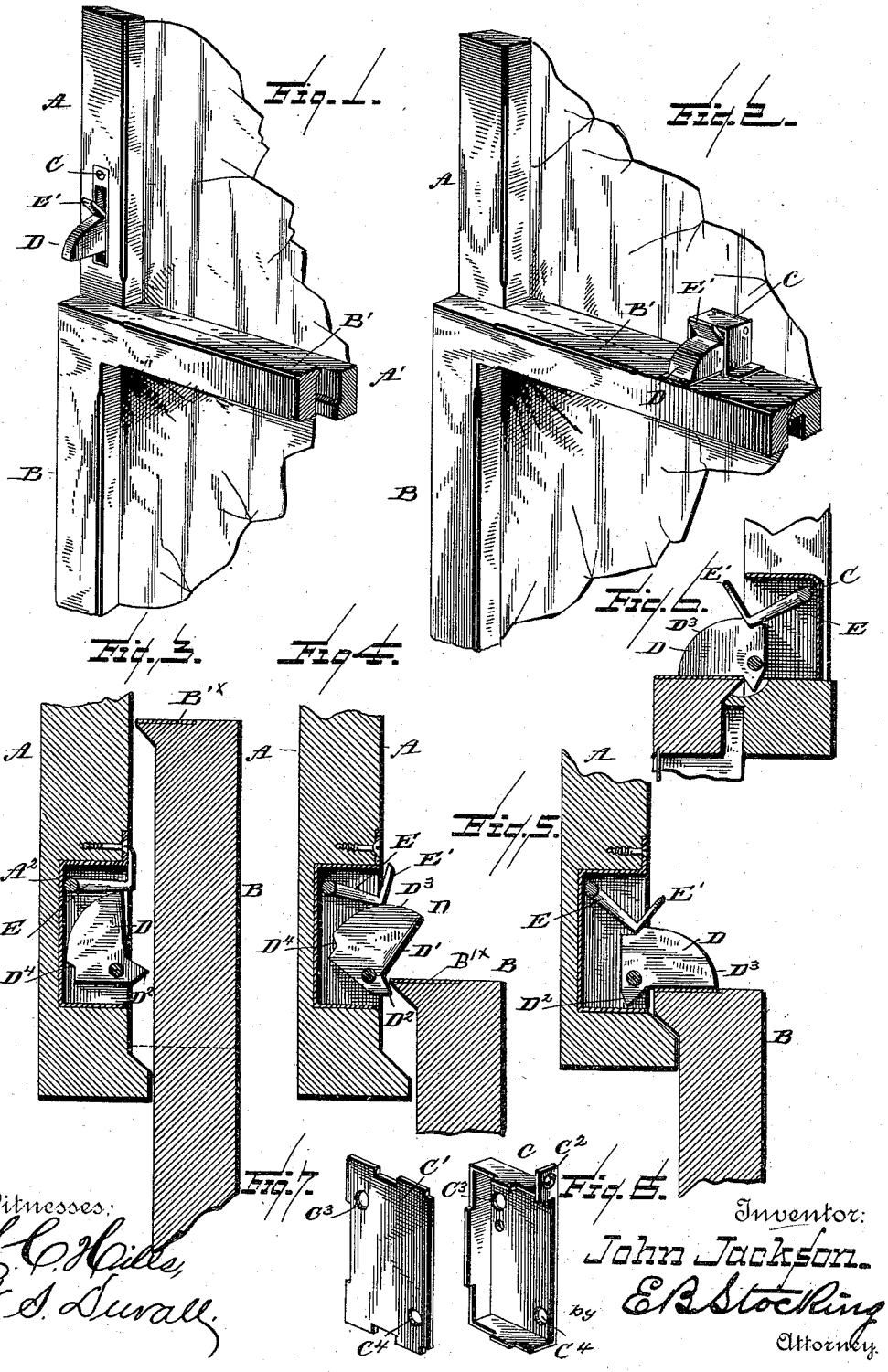
(No Model.)

J. JACKSON.

FASTENER FOR MEETING RAILS OF SASHES.

No. 383,886. Patented June 5, 1888.



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UNITED STATES PATENT OFFICE.

JOHN JACKSON, OF CLINTON, IOWA.

FASTENER FOR MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 383,885, dated June 5, 1888.

Application filed October 10, 1887. Serial No. 251,926. (No model.)

To all whom it may concern:

Be it known that I, JOHN JACKSON, a citizen of the United States, residing at Clinton, in the county of Clinton, State of Iowa, have invented certain new and useful Improvements in Sash-Locks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to sash-locks for windows, and among the objects in view is to provide an inexpensive, simple, effective, and automatic lock that will prevent the lower sash from being raised and the upper sash from being lowered when the window has been closed, except for the purpose of ventilation.

Other objects and advantages of the invention will hereinafter appear, and the novel features will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a portion of the upper and lower sashes of a window provided with a lock constructed in accordance with my invention, said lock being mounted in a position allowing the sashes to be raised or lowered slightly for ventilation. Fig. 2 is a similar view, the lock being in position, whereby no raising or lowering of the sashes is permissible. Figs. 3, 4, and 5 are details in vertical section showing the operation of locking and unlocking the sashes. Fig. 6 is a detail in vertical section showing the lock as mounted in Fig. 2. Fig. 7 is a perspective of the lock-case cover, and Fig. 8 a similar view of the lock-case.

Like letters of reference indicate like parts in all the figures of the drawings.

Referring more particularly to Figs. 1, 3, 4, and 5, A and B respectively represent the upper and lower sashes of a window, which are of the usual construction.

C represents the lock-case, and C′ its cover, the one being recessed and the other flanged, for connection with each other. The case as constructed is adapted to be set into a recess formed in one of the side rails of the upper sash of a pair, and is preferably formed with a perforated lip, C^2, (see Figs. 7 and 8,) for the reception of a screw by which it is maintained in the recess A^2 in said upper sash. If it be desired that the lock be so mounted in the side rail as to permit of a limited upward movement of the lower sash, or a like movement in a downward direction of the upper sash, the lock is mounted at a point above its meeting-rail A′ agreeing with the distance the sashes are to be moved when locked. If, however, it is desired to lock the sashes against any upward or downward movement whatever and no ventilation is required, I prefer to mount the lock at about the middle of the meeting-rail A′, in which case the form of casing is somewhat different and need be merely a simple housing flanged and perforated for securing it to said rail.

The lock-case C and its cover or plate are provided with opposite perforations, C^3 C^4, at their upper and lower diagonal corners, in the lower ones, C^4, of which is mounted a gravity-latch, D, which is pivoted at one end, and formed with the locking-face D′, a projecting tripping-lug, D^2, an upper rounded surface or face, D^3, and at the termination of which is formed a notch, D^4. This latch is so mounted in the lock-case that when the former is swung upwardly within the lock-case the face D′ of the latch is about flush with the outer edge of the lock-case and rail, leaving the tripping-lug D^2 projecting outwardly therefrom.

In the upper perforations, C^3, of the case is pivoted a gravity-pawl, E, having at its free end a projection, E′.

A tripping-plate, $B'^{\times}$, is mounted on the meeting-rail of the sash B, said plate projecting into the path of and adapted to come against the tripping-lug D^2.

As thus described it will be seen that, taking the parts in the position shown in Fig. 3, in which the lower sash is supposed to be raised, as said sash is lowered the plate $B'^{\times}$ first comes in contact with the tripping-lug D^2, as shown in Fig. 4, thus tripping the latch and causing it to fall and assume the position shown in Fig. 5, when the sash is entirely lowered, or the tripping-plate has passed beyond the point of contact with the lug D^2. As the latch swings out and down, the gravity-pawl E rides upon the curved face D^3 of the latch until its free end reaches the notch, D^4, when the pawl drops into the notch and thus prevents the raising of the latch, and consequently the raising of the lower sash or the lowering of the upper sash.

In order to raise the lower sash or lower the upper sash beyond the limit allowed by the position of the lock as thus mounted, it is necessary to swing the gravity-pawl E, by means of the bent projection E′, from contact with the latch, when the operation just described will be reversed and the desired act accomplished.

As before stated, the lock may be mounted so close to the lower sash as not to permit any raising whatever, or at such a distance therefrom as to permit the raising or lowering of the sashes an inch or more for ventilation.

Having described my invention and its operation, what I claim is—

1. A sash-lock comprising an outer casing or housing having pivoted therein a latch provided with a tripping-lug at one side of its pivot and a notch at its opposite side, and a gravity-pawl arranged above said latch and adapted to take into said notch, substantially as specified.

2. The combination, with the upper sash of a window recessed in one of its side rails, of a sash-lock mounted in said recess and provided with a latch pivoted therein and formed with a tripping-lug at one side of its pivot and a notch at the other side thereof, and a gravity-pawl mounted above the latch and adapted to take into the notch of a lower sash provided with a projecting tripping-plate mounted to come into contact with the tripping-lug of the latch, substantially as specified.

3. The case C, having the perforated lip C^2 and the perforations C^3 C^4, and the plate C′, having the similar perforations and connected to the casing, in combination with the latch D, formed with the straight and curved faces D′ and D^3, the tripping-lug D^2, and the notch D^4, and the gravity-pawl E, having the lift E′, and adapted to take into the notch D^4, substantially as specified.

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

JOHN JACKSON.

Witnesses:

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