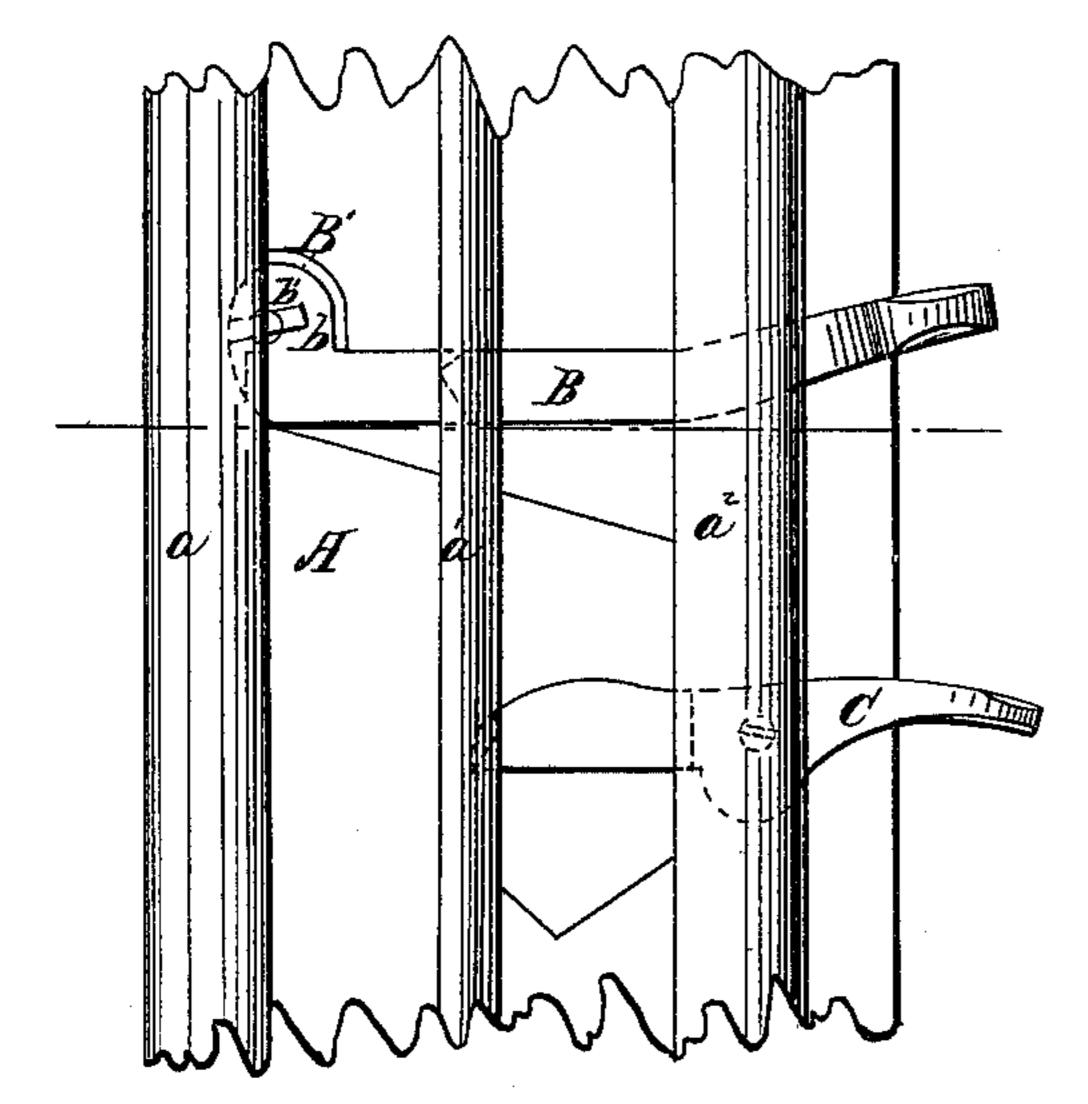
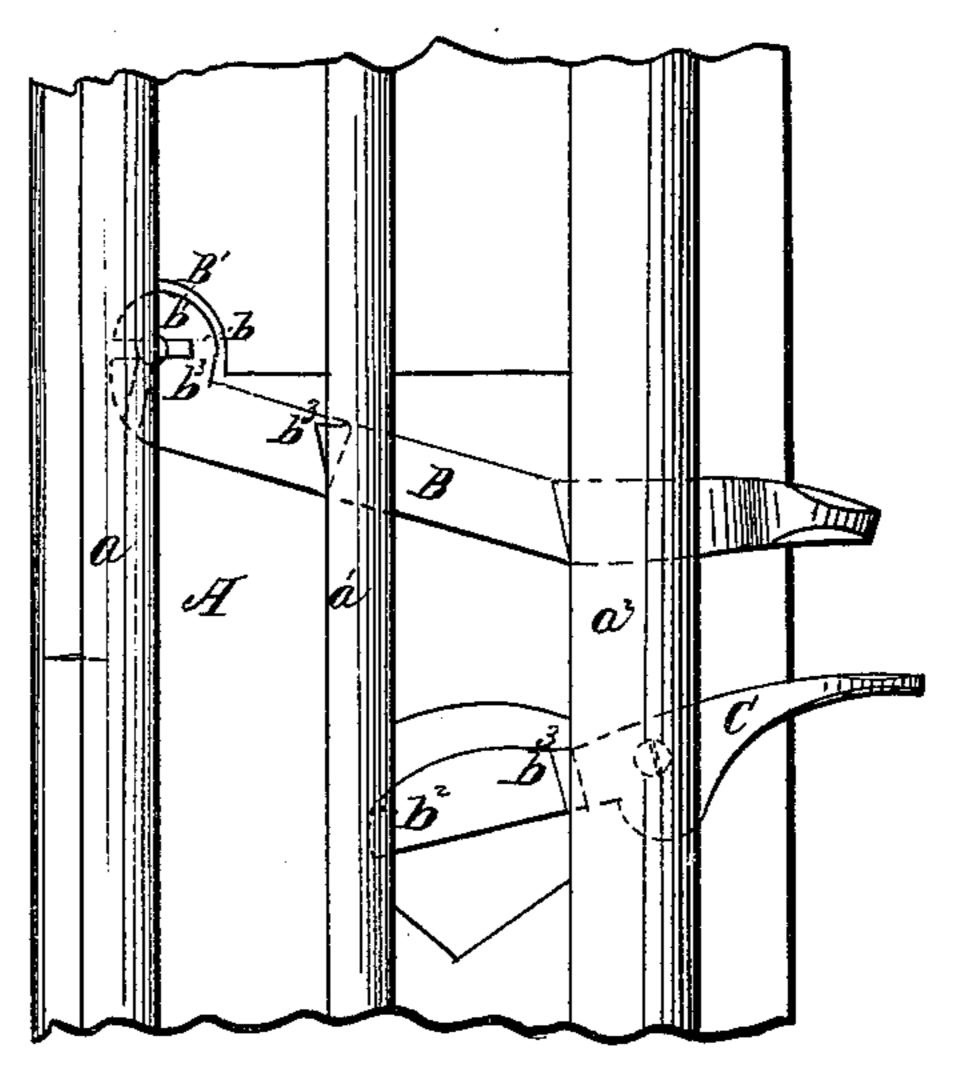
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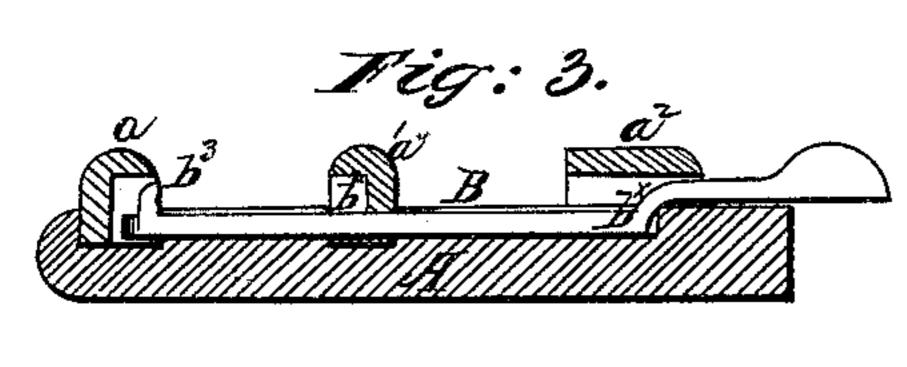
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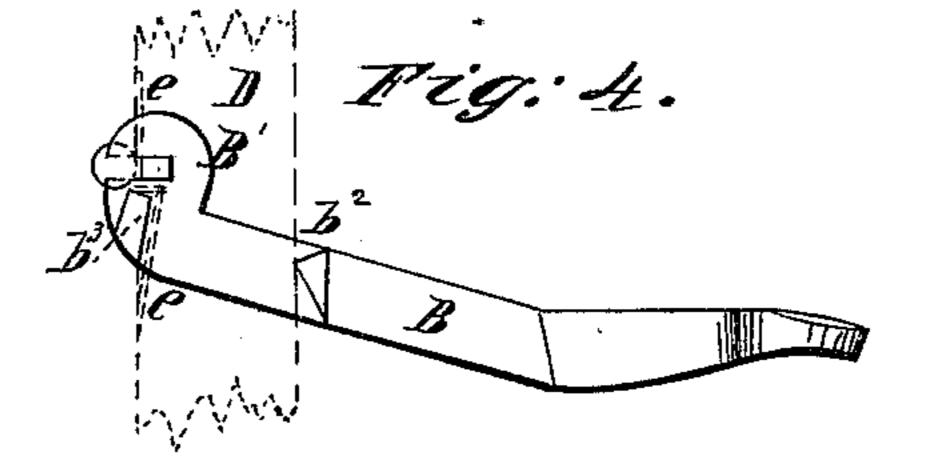
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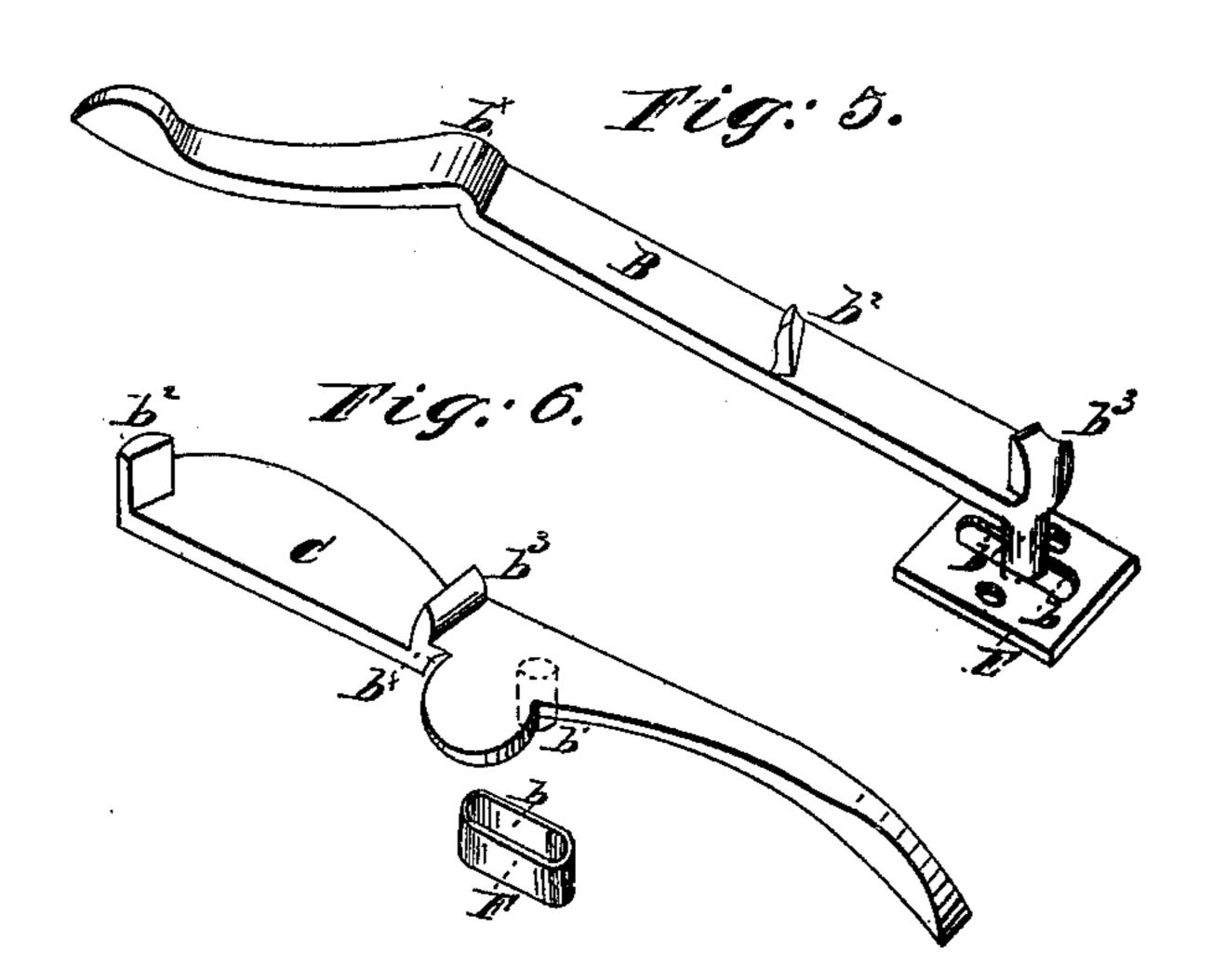
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## Anited States Patent Office.

## W. W. MAUGHLIN, OF BALTIMORE, MARYLAND.

Letters Patent No. 91,465, dated June 15, 1869.

## IMPROVED SASH-FASTENER.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, W. W. MAUGHLIN, of the city and county of Baltimore, and State of Maryland, have invented a new and useful Improvement in Sash-Fasteners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making a part of this specification, in which-

Figure 1 is a side elevation of a section of windowframe, with my improved fasteners applied in the position they occupy when the sash is to be moved;

Figure 2 is a similar view, with the fastener in po-

sition for holding or locking the sash;

Figure 3 is a bottom view of the upper sash-latch, or fastener;

Figure 4 is a front view of the latch, or fastener, with a section of the notched upper sash represented in red lines; and

Figures 5 and 6 are detached views of the fastener, showing modifications in construction hereinafter described.

Similar letters of reference denote corresponding parts wherever used.

My invention has for its object the improvement of the sash-fastener, upon which Letters Patent were granted to me on the 25th day of June, 1867.

Its nature or character will be understood from the following description.

In the various sash-fasteners, levers, or latches, in use hitherto, it has been found practically impossible to secure the top flight of sash hard up to the top of the window-frame, on account of the play, or lost motion in the lever, the weight of the sash invariably causing it (the sash) to settle down from one-eighth to one-quarter of an inch from the head. This has been a serious objection, on account of the wind penetrating the opening thus made between the head and meeting-rails.

It has also been found difficult to place the fulcrumscrew, or pivot, on which the lever acts, in such position that the clamping-lugs will project equally inside of the sash-beads, and failing to do this, the sash is bound between one of the lugs and the opposing sashbead, and is thereby made to work hard, and, in many instances, is prevented from working at all.

My improvement is intended to remedy these difficulties, to cause the upper sash to be locked tightly and firmly to the top of the window-frame, and to insure the free movement of the sash in the lugs of the latch-lever, clear of friction on the sash-head.

In the accompanying drawing—

A represents a section of the window-frame, notched or recessed, at a a1, to receive the fasteners B and C, the former for the upper sash, arranged, by preference, at or near the bottom of said sash, and the latter arranged just above the lower sash, when in its closed position, so that it may serve also as a lock, by dropping into a notch in the top of said sash.

The latch B is represented, in figs. 1, 2, and 4, as having a boss or semicircular flange or head, B', provided with an elongated perforation or slot, b, formed at such an angle to the lever, that when the lever is depressed into its clamping-position, the sides of the slot will be about horizontal, as shown in figs. 2 and 4.

A pivot, or screw, b', passes through the slot, into the frame, and forms the fulcrum on which the lever B turns.

The lever is provided with holding or clamping-lugs

 $b^2$   $b^3$ , which embrace the sash.

The slot b permits an endwise movement of the lever, sufficiently to bring the lugs  $b^2 b^3$  equally inside of the sash-beads a a1, in such manner as to cause them (the lugs) when the lever is depressed, to firmly clamp and hold the sash centrally with reference to said sash-beads, a result which would not be accomplished if the latch-lever vibrated upon a fixed point, as, in such latter case, one of the lugs would necessarily move outward, or away from the sash, when the lever is depressed, thereby causing the other lug to crowd the sash against the opposite bead.

The upper sash, (see D, fig. 4,) when pressed hard up against the window-frame, should be notched at a point, d, corresponding to the position of the latch, so that when the lever drops for holding it, the lug  $b^3$ , adjacent to the slot b, will be drawn out by the weight of the falling latch-lever, and moving horizontally outward into the notch in the sash, all possibility of dropping or settling of the sash is prevented.

An offset in the latch-lever, at  $b^{\times}$ , obviates the necessity of cutting away or recessing the window-frame

inside of the inner sash-bead  $a^2$ .

In figs. 5 and 6, the slot b, instead of being formed in the lever, is shown formed in a plate, E, or elongated thimble, F, which may be secured in the window-frame, with the slot or perforation placed horizontally, and the levers are provided with fixed fulcrumpins, adapted to move in said slots.

The lower sash-latch C may be attached to the frame in the same manner, but as it is not so essential that the settling of this sash should be prevented, the fixed fulcrum, represented at c, figs. 1 and 2, may be used

if preferred.

In some cases, it may be found sufficient to use simply the boss or head B' on the lever, fitting into an elongated socket in the jamb or casing, such as will permit an endwise movement of the lever, so that the lugs will always bear with equal force against the opposite sides of the sash; but a slot, which will give a horizontal movement to the adjacent lug, is found best to answer the purpose of holding the top sash tightly up against the frame.

One advantage of fitting or applying the latch-lever in the manner explained is, that after it has been let into the window-jamb, the position of the screw in the slot may be varied slightly without affecting the

action of the fastener upon the sash, the slot permitting sufficient end-play of the lever to accommodate the lugs to the sash, while, with the usual manner of fastening, the utmost accuracy in fitting is essential to

insure the proper action of the fastener.

The sash also may be prevented from settling, and may be firmly locked at any point, by simply forming a notch in the sash to receive the outer  $\log b^3$  on lever B, as, when such notch reaches the lug, the lever will instantly drop, and, by its own weight, will cause the lug to be drawn into the notch in the sash, and to hold it firmly.

The notches in the sash may be covered by a slight angle-iron or plate, (see x, fig. 4,) for preventing wear

upon the sash. The action of the fastener, aside from the points

above explained, wherein it differs from the latch covered by my former patent referred to, will be understood without further description.

What I claim as new, and desire to secure by Let-

ters Patent, is-

1. A sash fastener, adapted to move horizontally, and furnished with clamping-lugs, to hold the sash independently of the beads.

2. The latch, or fastener B, provided with the holding-lugs, or ears b2 b3, and slotted boss or head B', constructed and operating substantially as described. W. W. MAUGHLIN.

Witnesses:

ALEX. MAHON, EDM. F. BROWN.