(No Model.)

F. C. SMALSTIG & G. MAYER.

WINDOW BEAD FASTENER.

No. 565,368. Patented Aug. 4, 1896.

Fig. 1.

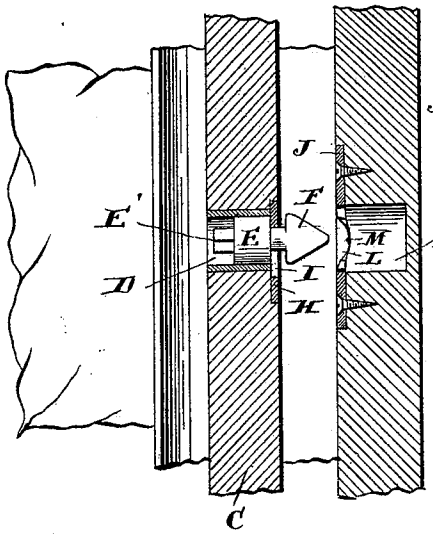


Fig. 2.

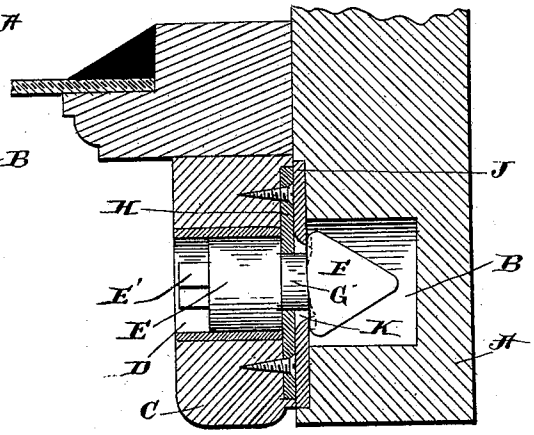


Fig. 3

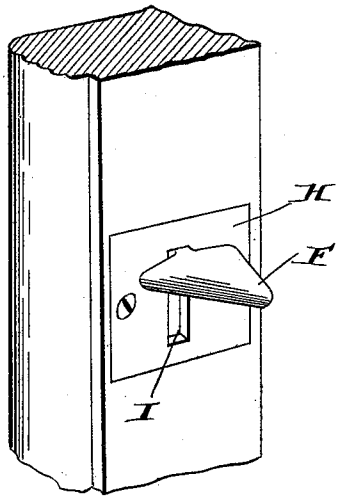
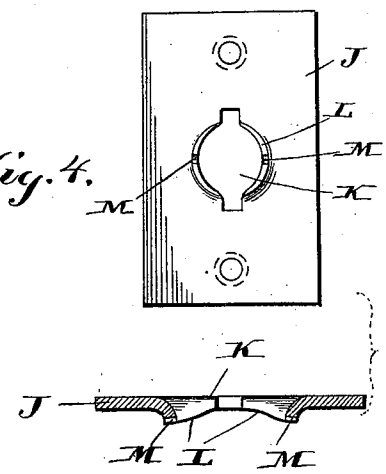


Fig. 4.



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UNITED STATES PATENT OFFICE.

FREDERICK C. SMALSTIG AND GABRIEL MAYER, OF ALLEGHENY, PENNSYLVANIA.

WINDOW-BEAD FASTENER.

SPECIFICATION forming part of Letters Patent No. 565,368, dated August 4, 1896.

Application filed February 18, 1896. Serial No. 579,783. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK C. SMALSTIG and GABRIEL MAYER, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Window-Bead Fasteners; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

This invention pertains to window-bead fasteners; and its object is to provide a device of improved form for effecting a secure fastening for the bead as well as a quick release when the same is to be removed.

The invention consists in the novel features of construction hereinafter fully described and claimed, and illustrated by the accompanying drawings, in which—

Figure 1 is a vertical sectional view of a portion of a window frame and bead illustrating our invention. Fig. 2 is a horizontal cross-sectional view of the same. Fig. 3 is a detail perspective view of a portion of the bead, showing the locking device in position upon its inner side. Fig. 4 illustrates in detail the locking-plate secured to the window-frame.

A designates the frame, which is formed with depression B, and C is the bead, formed with a transverse opening in which is fitted the ferrule D.

E is a turning-head within the ferrule and squared at its outer end, as at E′, to form a keyhold. The spear-head F projects outward and is integral with head E through the medium of short neck G. The lock is secured to the bead by plate H, the same being formed with slot I, through which the spear-head F is extended, and then the plate is moved downward, as indicated in Fig. 1, so as to confine neck G in the upper end of slot I, and then the plate H is secured to the bead, thus fixing the lock to the bead, but affording it free rotation.

Plate J is fitted over the depression B and secured to the window-casing, and is formed with the slot-opening K, through which the head F of the lock is projected when the bead is brought to position. The plate J is preferably formed of material having a slight spring tendency, and the edges of opening F are sprung inward slightly, as indicated at L, said edges being formed with notches M midway their ends. Now when the lock is turned to position indicated in Fig. 2 the shoulders F′ of head F will contact with the inwardly-sprung edges of opening K, and thus the turning of the lock will be resisted and the edges of the plate will have to be sprung outward, owing to the fact that the length of neck G is only equal to the combined thickness of plates H and J. However, the resistance offered is only comparatively slight, and the lock is readily turned so as to have the head F extended transverse the opening K, with the shoulders F′ resting in notches M, which serve to hold the head in proper position. When the bead is to be removed, it is only necessary to turn the lock sufficiently to turn the head from said notches, when the spring of the plate J will throw the head F out of engagement with the plate and in position to be withdrawn. The latch is entirely within the outer surface of the bead, as will be readily understood, and is adapted for use upon beads varying in thickness, as squared portion E′ may be readily reached with a key, whether near the outer surface of the bead or somewhat inward therefrom.

We have shown and described our invention as applied to window-beads, but it will be understood that the same is readily applicable to crates, boxes, and in fact all objects in which a lid or other surface is removably secured in place. It will be observed that plates H and J bear directly against each other, and hence the parts are clamped securely and permanently together and there is no opportunity to yield or become dislodged.

We do not claim, broadly, a bead-locking stem adapted to engage a slotted securing-plate, for such devices are old in many arts. Our claims are limited to the novel features of construction whereby the new and useful results set forth in this specification are attained.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination with plate J formed with an opening and having the opposite edges of the opening sprung laterally to form resilient bearing-flanges, of a locking-head adapted to be inserted in said plate through its opening and turned to a locking position against the pressure of said laterally-turned edges, substantially as shown and described.

2. The combination with plate J having an opening formed therein, and the edges of the opening sprung laterally to form resilient bearing-flanges, said edges being formed with opposite notches M, of a turning head adapted to be inserted through the plate-opening and turned to position against the pressure of said laterally-sprung edges, with the opposite portions of the head lodged in said notches M for holding the lock in place, substantially as shown and described.

3. The combination of plate J having an opening formed therein with the opposite edges of the opening sprung laterally to form resilient bearing-flanges, the lock provided with neck G, plate H fitting about said neck and holding the lock in place, the length of neck G being equal to the combined thickness of plates H and J, and head F at the outer end of the neck which is adapted to turn to transverse position against the pressure of the laterally-sprung edges of opening K, substantially as shown and described.

4. The combination of the window-bead provided with a transverse opening, the ferrule within said opening, the turning head E fitting snugly said ferrule, the keyhold E′ at the outer end of the turning head, neck G projected from the inner end of the turning head, head F at the outer end of the neck, plate H formed with an elongated slot so as to pass head F, said plate H being secured to the inner side of the bead with its slot out of line with the head F, and plate J adapted to be secured over the depression in the window-casing and provided with an opening through which head F is extended when it is turned to a locking position, substantially as shown and described.

5. The combination of frame A having depression B, plate J fitted over the depression and formed with an elongated opening K, the opposite edges of the plate being sprung backward into the depression B as at L to form resilient bearing-flanges, the bead formed with a passage-way, and the revoluble lock having projecting head F, plate H on the inner surface of the bead and adapted to bear against plate J, said plate also holding the lock in position in the bead passage-way, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

FREDERICK C. SMALSTIG.
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Witnesses:
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