H. G. Arnold,

Sash Fastener.

No. 69,746. Patented Oct. 15, 1867.

Fig. 1.

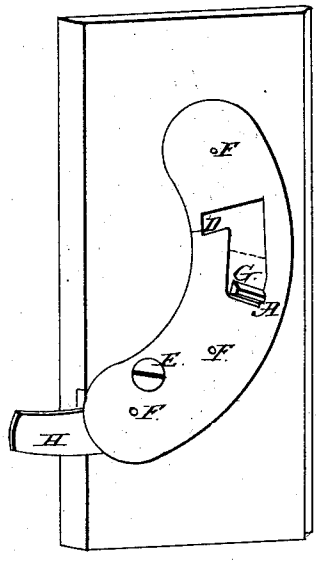


Fig. 2.

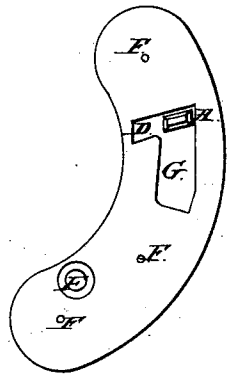


Fig. 3.

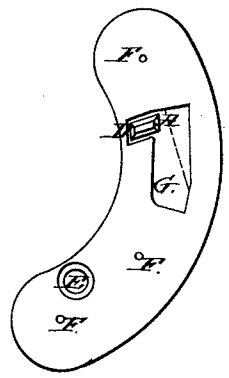


Fig. 4.



Fig. 5.

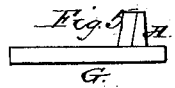


Fig. 6.

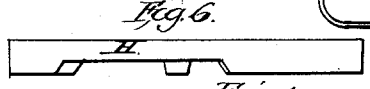


Fig. 7.

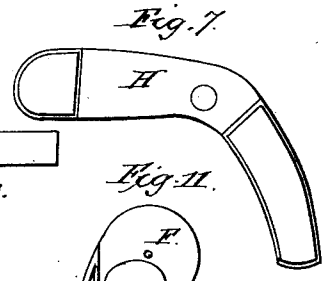


Fig. 8.

Fig. 9.

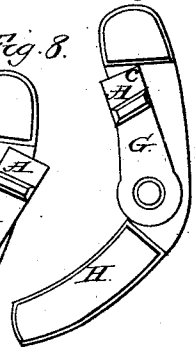


Fig. 10.

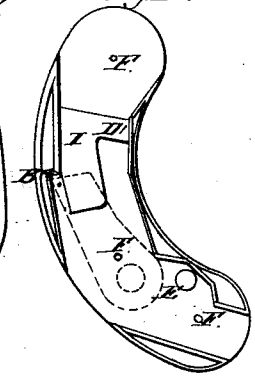
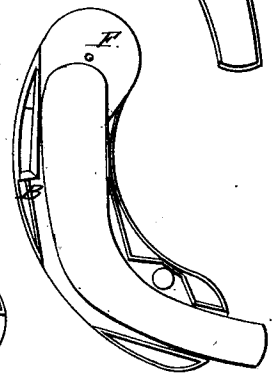


Fig. 11.



Witnesses:

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United States Patent Office.

HOBART G ARNOLD, OF ROCHESTER, NEW YORK.

Letters Patent No. 69,746, *dated October* 15, 1867; *antedated September* 17, 1867.

IMPROVED WINDOW-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, HOBART G. ARNOLD, of Rochester, in the county of Monroe, and State of New York, have invented new and useful improvements in a Fastener or Lock for Window-Sash, of which the following is a full and exact description, reference being had to the accompanying drawings making part of the specification, and to the letters of reference marked thereon; and of said drawings—

Figure 1 is a perspective view of the lock, as applied to the sash, and let in even with the face of it, with the bolt extended downward and outward, showing its position when the sash is locked. Letter I represents a slot or opening in the box for the nib A, by which the lock is worked.

Figure 2 represents the nib, drawn inward, with the bolt and tumbler hereinafter described, showing their position when the sash is locked. The downward motion is by their own weight.

Figure 3 represents the nib moved to the left hand and into the notch D, which secures it in that position any length of time desired.

Figure 11 is an inside view of the lock, with the bolt partly drawn up. The tumbler is between the bolt and box, so that it cannot be seen.

Figure 4 represents the tumbler by which the lock is operated and locked upward or downward, parts of which are shown in figs. 1, 2, and 3.

Figure 5 is a lateral view of the tumbler.

Figure 7 is a separate view of the bolt.

Figure 6 is a lateral view of the same.

Figure 8 is a view of the bolt and tumbler. The latter is here let in even, and they are secured together loosely by a pin, as here shown.

Figure 9 represents the same drawn upwards, as shown in fig. 3.

Figure 10 is an inside view of the box. Letter B represents the notch into which the tumbler drops when it is down, and holds it there so that the bolt cannot be raised or moved inward by any pressure upon the outer end of it. The dotted lines here given represent the position of the tumbler G when it falls into notch B.

The nature of my invention consists in so constructing and arranging a box, bolt, and tumbler that they may be operated by a nib or handle on the tumbler, the latter always locking or holding the bolt securely when downward and outward as far as it will go, so that no pressure on the outer end of the bolt can affect it, or it may, at the pleasure of the person operating it, hold it inward and upward for any length of time desired, leaving the sash free, so that both hands may be wholly used in raising or lowering it, the natural movement of the nib remaining free at pleasure, in its upward and downward motion, the same as though the bolt were not intended to be locked up or down; also, so that the upper end of the box may be varied toward either edge of the sash, in applying it, as may be desired, for the different widths of sash or thickness of moulding, the box naturally admitting a long and large bolt, which, with its own weight and that of the tumbler, gives a strong motion downward and outward, thus forming a convenient, reliable, and durable lock or fastener for all widths and kinds of sash, weighted as well as others.

To enable others skilled in the art to make and use my invention, I refer again to the drawings, which are intended to be full size, or the size best adapted to all widths of sash. The bolt and tumbler should be sufficiently loose to work freely.

The outside form of the box, as here shown, is intended for economy in manufacturing and for convenience in applying it to the sash. In applying, I use the box as a pattern in marking for the mortise. The small holes F F F are for convenience in marking for the point of the bit, with which I first bore, and afterwards trim with a narrow chisel, which is easily and quickly done.

By referring to fig. 8 it will be seen that the tumbler, in its natural upward and downward motion, inclines to the right, so that it is not affected by notch D, and when down naturally falls into notch B, holding the bolt securely against any pressure that may be brought to bear upon the outer end of it; neither is it affected by notch B, in raising it upward with the handle, but when the nib is moved into notch D, as shown in fig. 3, the tumbler inclines to the left, which, with the form of the notch, holds the bolt up, leaving the sash unfastened,

so that both hands may be used in raising or lowering it, or it may be left in that position any length of time desired.

It will be seen that it requires but a slight effort to move the nib A into notch D, or to remove it into its natural position, as shown in figs. 1, 2, and 8.

The general arrangement of the lock has been made, in part, with reference to its adaptation to variations of the upper end of it in applying it to the sash, towards either edge of the same, as may be desirable, for the various widths of sash or thickness of moulding, in connection with the security afforded by the tumbler G and notch B to the bolt when the latter extends outwardly.

Varying the top of the box either way, as above, while the lower end of the box, through which the bolt passes outwardly, remains about even with the outer edge of the sash, as it should do, (see fig. 1,) will also vary proportionately the outer end of the bolt. This renders the locking of the bolt down by the tumblers in notch B the more important, but, with the security thus given, the upper part of the box may be varied, as desirable, without lessening the security of the lock or detracting from its utility.

This arrangement allows of a longer box, better adapted to the variations above named, consequently a longer and heavier bolt, giving a stronger motion downward, without increasing the weight or expense of the lock.

Having thus fully described my invention and its utility, what I claim as new, and wish to secure by Letters Patent, is—

A sash-lock, composed of bolt H, tumbler G, and notched plate, arranged as and for the purposes set forth.

HOBART G. ARNOLD.

Witnesses.

E. HITCHCOCK,

H. N. ARNOLD.