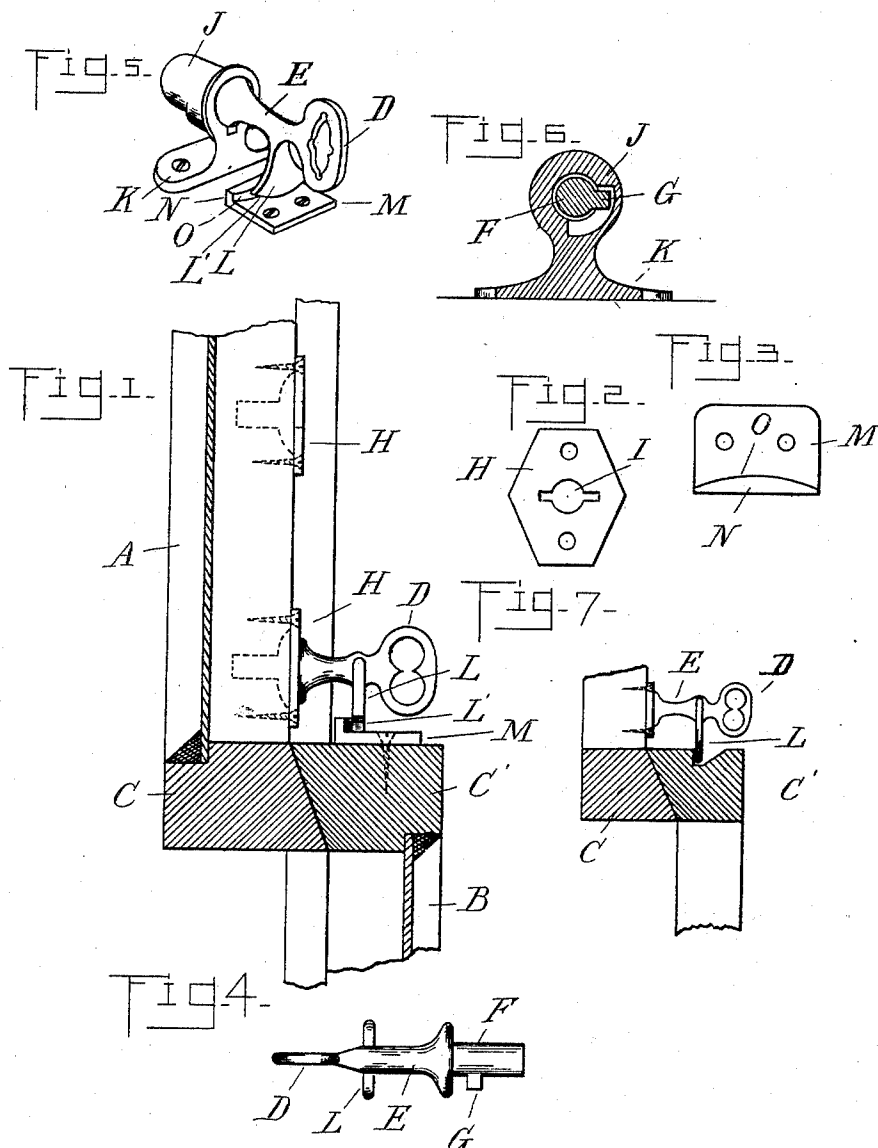


(No Model.)

A. RAYMOND & F. S. NORTH.
FASTENER FOR THE MEETING RAILS OF SASHES.

No. 503,294.

Patented Aug. 15, 1893.



Witnesses:

Otto F. Barthel,
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UNITED STATES PATENT OFFICE.

ADELBERT RAYMOND AND FRANK S. NORTH, OF DETROIT, MICHIGAN.

FASTENER FOR THE MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 503,294, dated August 15, 1893.

Application filed November 7, 1892. Serial No. 451,250. (No model.)

To all whom it may concern:

Be it known that we, ADELBERT RAYMOND and FRANK S. NORTH, citizens of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention consists in the peculiar construction of a detachable key adapted to enter and be locked in a key plate on the upper sash having a stem extending across the lower sash and a wing on the stem adapted to normally turn the key with the locking lug into its locked position. Further in the peculiar construction of a wearing plate on the upper sash with which this wing is adapted to engage to tightly lock the windows in their closed positions and hold them against rattling, all as more fully hereinafter described.

In the drawings, Figure 1 is a vertical section through the adjacent portion of the upper and lower sash of our device applied to it shown in position in which the two sashes are locked together. Fig. 2 is a detached elevation of the key plate. Fig. 3 is a plan view of the wearing plate. Fig. 4 is a top plan view of the locking key. Fig. 5 is a perspective view of the locking key in position together with a modified form of key plate. Fig. 6 is a vertical section through the key plate, the parts being in the position shown in Fig. 5. Fig. 7 is an elevation similar to Fig. 1 showing the key used without the wearing plate.

A represents the upper sash and B the lower sash, of which C C' are respectively the meeting rails.

D is a key having a stem E and a shank F.

G is a locking lug extending at right angles from the shank.

H is a key plate which is provided with suitable apertures for securing screws and also with an aperture I adapted to permit the insertion of the key shank and lug, and so constructed that when the key is turned from its entering position it will be locked therein.

Instead of using the key plate H where there is no center rail we may use a key plate such as shown at J in Fig. 5, comprising a

socket and a base plate K secured to the upper face of the meeting rails C of the upper sash. The stem E of the key is provided with a wing L having a curved or cam shaped bearing face L' at its lower edge, the wing L and the lug G projecting at right angles to each other from the axis of the key.

M is a rail plate secured on the upper face of the meeting rail C' of the sash and against which the curved bearing L' of the wing L is adapted to engage to force the two sashes tightly to their closed position and lock the key tightly in its position. This plate is preferably provided also with a locking lug N having the curved or cam shaped bearing O on its outer face against which the inner face of the wing L is adapted to engage, when turned to its locked position, whereby the two meeting rails will be drawn together to prevent rattling thereof. I preferably employ a series of key plates, such as H arranging them on the sash in vertical series, as shown in Fig. 1, so that the key may be inserted in any of these plates and the sash opened more or less for ventilating purposes. At the same time as the key enters the upper sash and projects across the path of the lower sash the sash will be prevented from further opening. If desired the wearing plate M may be entirely dispensed with or the lug N may be omitted and the groove may be cut in the top of the sash as shown in Fig. 6. By arranging the wing L at right angles to the locking lug G as soon as the key is engaged in the plate, the weight of the wing will tend to turn the key to its locked position and any jar or shaking of the window will not effect it. It is obvious with our construction when the key is in position to allow of a partial opening of the window that either sash may be moved independently of the other without moving the key.

What we claim as our invention is—

1. In a sash fastener, the combination of the upper sash having a key plate, a detachable key having means for securing it in said plate, and a stem extending over the lower sash, a wing on said stem having a curved bearing and a wearing plate on the meeting rail of the lower sash against which said wing is adapted to bear, substantially as described.
2. In a sash fastener, the combination of the

upper sash having a vertical series of key
plates, a detachable key having means for se-
curing it in said plate, and a stem extending
over the lower sash, a wing on said stem hav-
5 ing a curved bearing, a wearing plate on the
meeting rail of the lower sash, against which
the curved bearing is adapted to be turned
and a cam shaped lug on the wearing plate
against which the side of the wing bears to
10 draw the meeting rails together, substantially
as described.

3. In a sash fastener, the combination of the

uppersash having vertical series of key plates,
a key adapted to engage and be detachably
secured therein, and a stem extending free 15
into the path of the lower sash, substantially
as described.

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

ADELBERT RAYMOND.

FRANK S. NORTH.

Witnesses:

M. B. O'DOHERTY,

N. L. LINDOP.