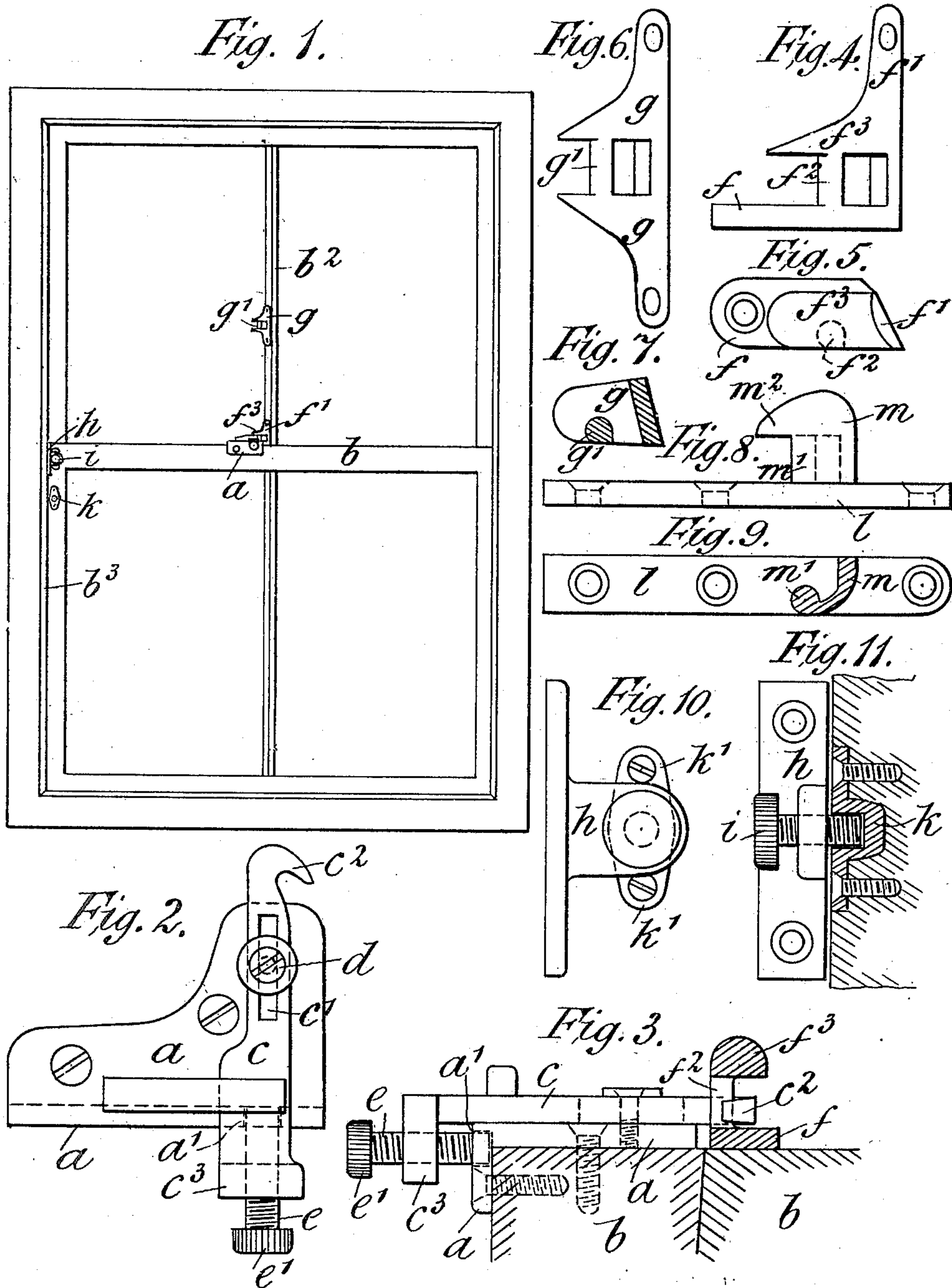


W. RUNDELL.
SASH FASTENER.

(Application filed Aug. 13, 1900.)

(No Model.)



Witnesses
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WILLIAM RUNDELL, OF PLYMOUTH, ENGLAND.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 704,580, dated July 15, 1902.

Application filed August 13, 1900. Serial No. 26,764. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM RUNDELL, commission agent, a subject of the Queen of Great Britain and Ireland, residing at 1 Alvington Terrace, Old Road, Laira, Plymouth, England, have invented certain new and useful Improvements in Window-Sash Fasteners and Ventilators, of which the following is a specification.

10 This invention relates to improvements in window-sash fasteners and to means for adjusting and fixing the sashes in any desired position for the purposes of ventilation.

The improved fastener consists of an angle-plate screwed to the top of the meeting-rail of lower sash and to the inside of said rail, so as to fix it firmly and rigidly in position. Upon the top of this plate is pivoted a locking-bar, which is formed with a slot, through which the pivotal pin or stud passes for permitting the said bar being drawn back or pushed forward for the purpose hereinafter explained. The forward end of the bar is formed as a hook and the rear end is formed with a vertical flange or extension through which passes a screw, which is caused to engage with a recess in the inner vertical face of the angle-plate, whereby the said bar is locked in its engaged position for locking the sashes upon turning the screw by means of a knob or handle thereon. The hooked end of the bar is caused to engage with a locking-catch consisting of a small right-angled bracket formed with a vertical bar extending from the base to a horizontal arm projecting from the vertical face a short distance above the base. The hook engages sidewise with the vertical bar and lies between the base and horizontal arm of the bracket. The base of the said locking-catch is screwed to the meeting-rail of the upper sash, and its vertical face or side is also screwed to the center bar of the window, where such is employed, or to the side of the upper sash, the said face being formed at a suitable angle to fit the bevel of the said bar or side. A similar locking-catch may also be used in combination with the fastener for purposes of ventilation, a single side only, however, being formed thereon, which is screwed at top and bottom to the central bar or to the side of the sash at a suitable distance from the meeting-rail on the top sash, according to the distances

the sashes are required to be left open. The sashes are thus locked in their open or ventilating positions by causing the hooked end of the locking-bar to engage with the said catch when the latter is brought opposite to the same. A bracket is also screwed to the side beading of the window-frame and fitted with a set-screw, which upon being turned is caused to engage with a socket formed with flanges for securing it to the inside of the meeting-rail or side of lower sash in which the socket is recessed. The set-screw thus forces the sashes together and prevents their rattling. It likewise locks the lower sash and prevents the sashes being raised when the upper one is lowered for ventilation.

In cases where the ventilating devices are not required the fastener is attached to the center of the lower-sash meeting-rail and a plate fixed to the meeting-rail of the upper sash opposite the fastener. This plate is formed with a hook-shaped or curved hollow projection, with which the hooked end of the locking-bar is engaged in the manner hereinbefore described.

In the accompanying sheet of drawings, Figure 1 is an inside elevation of a window having my improvements fitted thereto. Fig. 2 is a plan of the fastener fixed to the lower sash; and Fig. 3 is an end view thereof, showing it locked to the catch, which is in section. Fig. 4 is a side view of the locking-catch fixed to the upper sash, and Fig. 5 is a plan of the same. Fig. 6 is a side view of the locking-catch used for ventilating purposes, and Fig. 7 is a horizontal section thereof. Fig. 8 is a side view of the locking catch or plate used when the ventilating devices are dispensed with, and Fig. 9 is a horizontal section thereof. Fig. 10 is a side view of the bracket fixed to the beading for preventing rattling of the sashes; and Fig. 11 is a view, partly in section, at right angles to the same, showing also the locking plate or socket fixed to the lower sash.

a is the angle-plate, screwed to the inside meeting-rail *b*.

c is the locking-bar, pivoted, by means of the stud *d*, to the plate *a* and formed with the slot *c'*, through which the stud *d* passes.

c² is the hook at the forward end of the bar, and *c³* is the flange or extension at the rear end, through which passes the screw *e*, formed

with the knob or handle e' , or it may have a square end for engaging with a key or spanner for turning the same.

a' is the recess in the vertical face of the plate a , into which the end of the screw enters and is held for operating and locking the bar c .

f is the locking-catch, the base of which is screwed to the outer meeting-rail b' , while the vertical side f' is screwed to the center bar b^2 of the upper sash or to the side of the said sash, the side f' being formed at an angle corresponding to the beveled side of bar b^2 or of the side frame or sash.

f^2 is the vertical bar extending from the base f to the horizontal arm f^3 of the catch.

For unlocking the window the hook c^2 engages with the bar f^2 , as seen in Fig. 3, the screw e being turned so as to draw back the bar c until the hook is drawn tight against the bar f^2 . For unlocking the screw is turned in the reverse direction and disengaged from the recess a' , when the bar c may be turned on its pivot to disengage it from the locking-catch. The slot c' permits of the bar c being drawn back, so as to clear any portion of the upper sash for raising or lowering the two sashes.

g is the locking-catch used for purposes of ventilation, the bar g' of which engages with the hook of the locking-bar c to lock the sashes together in a similar manner to that described with reference to the locking-catch f . The catch g is screwed at its side to the beveled side of the center bar or the side frame of the sash a suitable distance from the meeting-rail, according to the distance one or other of the sashes is to be left open, and more than one of such catches may be fitted to the upper sash if required.

h is the bracket, screwed to the side beading b^3 , and i is the set-screw passing through the same and engaging with the socket k , let into the side of the meeting-rail or side of inside sash, to which it is screwed by the flanges k' .

Upon tightening up the screw i the pressure of the latter against the socket forces the two sashes together and prevents rattling, and by its engagement with the socket also locks and prevents the sashes being raised when the upper one or both sashes are open for ventilation. The sashes may also be locked in their raised position by fixing a second socket lower down to the inside sash, which when the said sash is raised is brought opposite to the set-screw i and engaged therewith. The catch-plate shown in Figs. 8 and 9 is screwed to the center of the meeting-rail of upper sash by its base l , and m is the hook-shaped or curved hollow projection formed thereon. The hook of the locking-bar c when in its locked position engages with the vertical edge m' of the catch and lies between the base l and the head or projection m^2 , thus drawing the sashes firmly together and preventing opening or closing of the same. The said catch-plate is preferably used where there is no center bar and where ventilating devices are not required.

The various parts as described can be made right or left handed and be of any size to suit all gages of sashes.

Having now fully described the nature of my said invention, what I claim, and desire to secure by Letters Patent, is—

The improved means for fastening window-sashes in their closed or partly-open position comprising the combination with the sashes of locking-catches consisting of brackets, such as f , fixed to the upper sash at a suitable distance apart, and formed with a vertical bar f^2 and a horizontal arm f^3 , and a hooked locking-bar c engaging with one or other of the said catches, and provided with a tightening-screw, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WILLIAM RUNDELL.

Witnesses:

FRANCIS CROUCH,
JOHN MOORE ISCETT.