

No. 738,766.

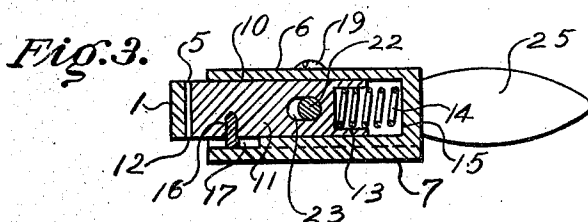
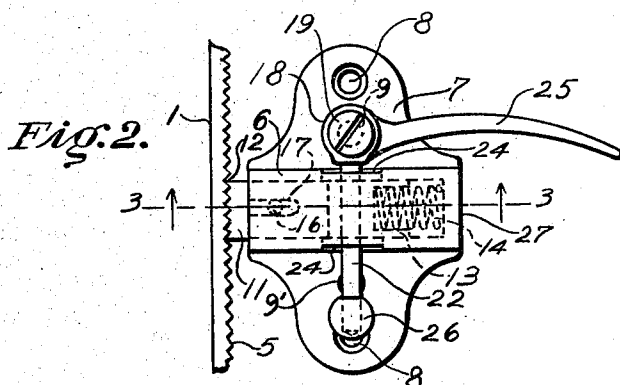
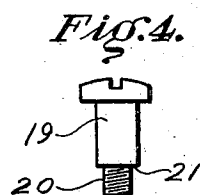
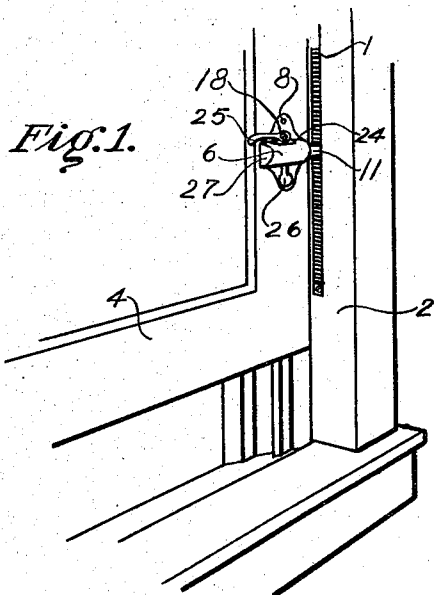
PATENTED SEPT. 15, 1903.

R. A. BROADHURST & W. MITCHELL.

SASH FASTENER.

APPLICATION FILED AUG. 19, 1902.

NO MODEL.



Witnesses:

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UNITED STATES PATENT OFFICE.

ROBERT A. BROADHURST AND WILLIAM MITCHELL, OF CHICAGO, ILLINOIS.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 738,766, dated September 15, 1903.

Application filed August 19, 1902. Serial No. 120,178. (No model.)

To all whom it may concern:

Be it known that we, ROBERT A. BROADHURST and WILLIAM MITCHELL, both citizens of the United States of America, and residents of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification.

The main object of our invention is to provide an improved form of sash-fastener being simple in structure and operation and readily reversible for the purpose of application to either the right or left side of the sash. We accomplish this object by the device shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a window sash and frame, partly broken away and having thereon a sash-fastener constructed according to our invention. Fig. 2 is an elevation of the sash-fastener removed from the sash. Fig. 3 is a section along the line 3 3 of Fig. 2. Fig. 4 is an elevation showing the construction of the pivot 19.

In the construction shown a rack 1 is embedded in the face of the window-frame 2, near the sash 4, and extends parallel to the sash 4 for a considerable distance. The rack 1 is provided on its outer face with a series of regularly-spaced teeth 5. The casing 6 is provided with a broad base 7 and is secured to the inner face of the sash 4, as indicated in Fig. 1. The base 7 is provided with suitable screw-holes 8 and with two screw-threaded apertures 9, located at equal distances from and on opposite sides of the center line of the casing 6. The casing 6 is hollow, being provided with a cylindrical cavity 10, which is open at one end. A bolt 11 fits the cavity 10 and is longitudinally slidable therein. The bolt 11 is suitably formed at its outer end 12 to fit the teeth of the rack 1. The inner end of the bolt 11 is provided with a recess 13, within which is seated a coiled spring 14. The spring 14 bears against the inner wall 15 of the cavity 10 and normally urges the bolt 11 out of said cavity. Rotation of the bolt 11 within the casing 6 is prevented by means of the pin 16, which engages a keyway 17 in the lower wall of the cavity 10. The operating-lever 18 is fulcrumed to the base 7 by means of a pivot 19. The lower end 20 of the pivot 19 is screw-threaded and adapted to fit

one of the apertures 9 in the base 7. The pivot 19 is also provided with a shoulder 21, which is adapted to be jammed against the base 7 to prevent the pivot 19 from becoming loosened by the turning of the lever 18. The lever 18 is preferably of the form shown, having one arm 22 extending transversely through the slot 23 in the bolt 11 and the corresponding slots 24 in the casing 6 and having a second arm 25 extending substantially at right angles to the arm 22. A knob 26 is threaded to the end of the arm 22 and is removable from same.

In operation the casing 6 is rigidly secured to the sash 4 near one of the sides of the frame 2. The rack 1 is embedded in the face of the frame 2 parallel with the sash 4 and in suitable position to be engaged by the pin 11. A fastener may be secured at each side of the sash; but only one of the fasteners is shown in the drawings. The pin 11 may be released from contact with the rack 1 by means of either of the arms of the lever 18. The spring 14 returns the bolt 11 into engagement with the rack immediately upon the release of the lever 18. When the sash is raised, it is only necessary to push the arm 25 upward to withdraw the bolt 11 from contact with the rack 1, and continued upward pressure upon the arm 25 assists in opening the window. To lower the sash, it is preferred to release the bolt 11 by pulling backward upon the arm 22. The end 27 of the casing 6 serves as a convenient brace for the thumb of the operator's hand when his fingers are pulling backward upon the arm 22.

Since the casing 6 is perfectly symmetrical, the device may be readily changed to suit the right or left hand side of the sash by unscrewing the pivot from one of the holes 9, reversing the lever 18, so as to bring the arm 25 on the opposite side of the casing 6, and inserting the pivot 19 in the other aperture 9.

It will be seen that numerous details of the device shown may be altered without departing from the spirit of our invention. We therefore do not confine ourselves to such details except as hereinafter limited in the claims.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a sash-lock, a casing comprising a bar-

rel having an ear extending from each side, a threaded aperture in each ear, and a slot in each side of the barrel near the aperture, in combination with a bolt slidable in the barrel, 5 and having a slot extending through same opposite the slots in the barrel, a screw removably seated in one of said threaded apertures, a lever fulcrumed on said screw having one arm extending through one of the slots in the 10 barrel and into the slot in the bolt and having its other arm extending outwardly of the barrel, substantially as described.

2. The combination of a window-frame; a sash slidably mounted in said frame; a rack 15 secured to said frame and extending for a considerable distance along the sash; a casing secured to the sash; a bolt slidably mounted in said casing, and having one end adapted to engage said rack, said bolt having a slot ex-

tending transversely through same; a spring 20 seated in said casing and normally urging said bolt toward said rack; and a bell-crank lever fulcrumed on the casing at one side of said bolt, said lever having one arm extending transversely through the slot in said bolt 25 and having a second arm extending along said casing substantially at right angles to said first arm, both of said arms being adapted to be grasped by the hand for the purpose of moving said bolt out of engagement with said 30 rack, substantially as described.

Signed at Chicago this 14th day of August, 1902.

ROBERT A. BROADHURST.
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Witnesses:

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