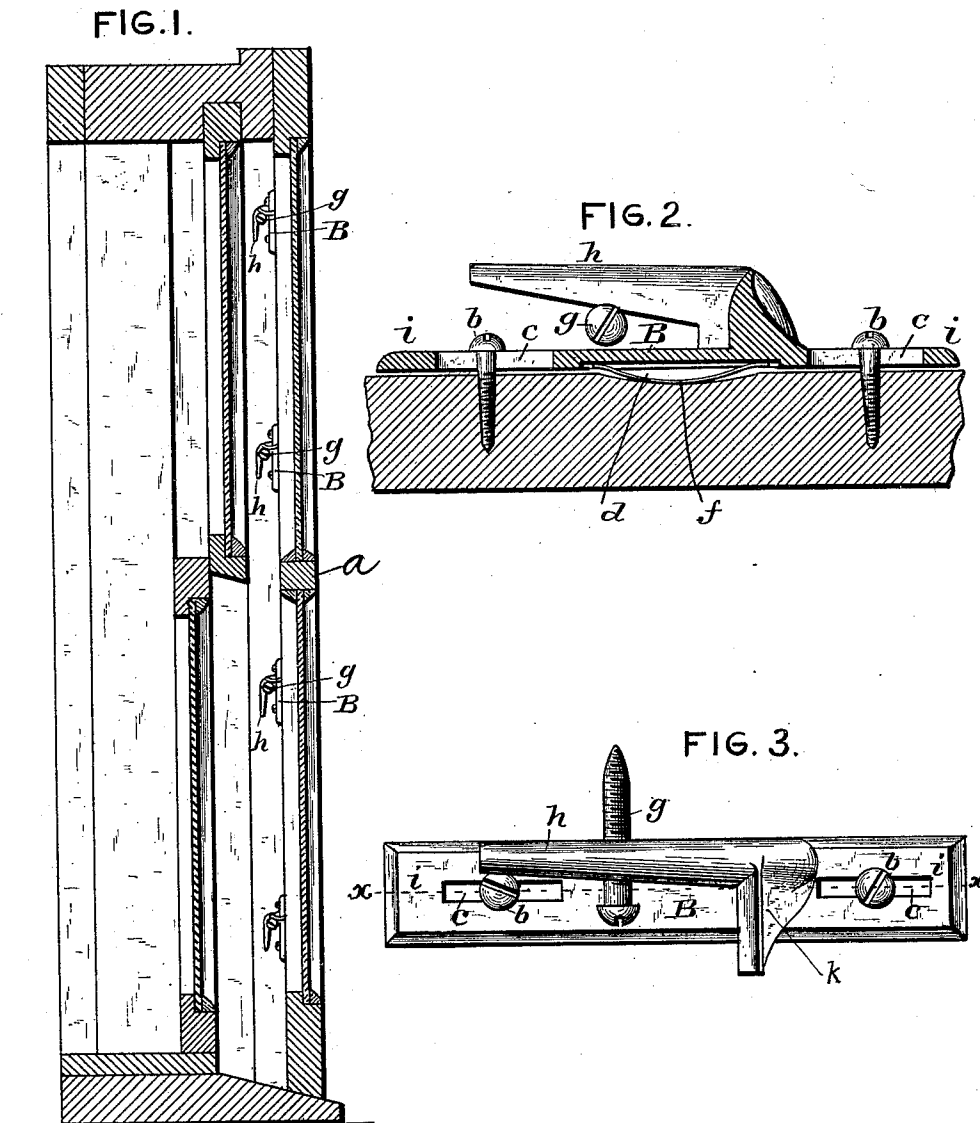


(No Model.)

C. R. MOORE.
FASTENING FOR STORM WINDOWS.

No. 424,014.

Patented Mar. 25, 1890.



ATTEST.
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CHARLES R. MOORE, OF NEWPORT, VERMONT, ASSIGNOR OF ONE-HALF TO
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FASTENING FOR STORM-WINDOWS.

SPECIFICATION forming part of Letters Patent No. 424,014, dated March 25, 1890.

Application filed December 26, 1889. Serial No. 334,945. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. MOORE, a citizen of the United States of America, residing at Newport, in the county of Orleans and State of Vermont, have invented certain new and useful Improvements in Fastenings for Storm-Windows, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to fastenings for that class of windows known as "storm-windows" or "double windows," which are, particularly in northern latitudes, applied outside of the ordinary windows to remain during the winter and removed for the summer. As ordinarily applied these windows are screwed against the outside face-casing, the screws drawing them to a close fit. To obviate the use of screws, which wear out the wood-work from year to year, and to furnish a fastening acting to equally well secure a close joint between the casing and the storm-sash, is the object of my invention. My fastening also does away with the use of tools and obviates the necessity of using a ladder in operating it in windows of the first story. I attain these objects by the devices shown in the drawings, and hereinafter fully explained.

In the drawings, Figure 1 is a vertical section of a window in a house, showing its casing, its two sashes, and the storm-window *a*, carrying my fastening. Fig. 2 is a vertical longitudinal section of my fastening in line *x* *x* of Fig. 3, hook *h* partially pressed down upon stud *g*. Fig. 3 is a top plan view of the same.

Like letters of reference designate the same parts in the several figures.

The metallic fastener B, preferably of malleable iron, is attached to the storm-sash *a* by the headed or flanged screws *b b*, passing through the slots *c c*, which allow of moving the fastener up and down. Within the back or bottom of the bed-piece *i* is a rectangular chamber *d*, capable of containing the flat metallic friction-spring *f* when compressed. The stud *g* is not attached to the sash but to the window-casing. It may be a screw or a plain metallic pin, preferably of circular transverse section. This stud, as shown, is engaged by hook *h* of the fastener B. It will be seen that

the heads of the screws *b* press against the bed-piece *i* on each side of the slots *c*, and that the spring *f* forces the bed-plate against the said screw-heads, friction then being divided between the points named and the belly of the spring against the sash. The catch is a gravity-catch, and without the friction-spring *f* would drop by its own gravity to engage the hook *h* with the stud *g*, but the said spring holds it at any elevation desired, as just described. The form of the hook *h*, it being beveled on its under side, is such that when the fastener is forced downward by pressure the storm-sash will be drawn against the outer casing of the window.

The fastener may be applied to sash in such position or location as to be most conveniently accessible from the inside, while the permanent sash remains in the casing.

The particular function of the friction-spring *f* is to hold the fasteners in position when the sash is held vertical in process of applying it to or detaching it from the casing. In applying the sash one person places it in position from the outside, while an assistant, who may be a child, partly presses down the fasteners B until engagement with the stud *g* is effected. This holds the sash in position, and the final tightening may be done later. Tightening is accomplished by downward pressure upon the thumb-rest *k*.

Having thus fully described my invention, I claim, and desire to secure by Letters Patent, the following:

1. In a storm-window fastening, the combination of the fastener B and the friction-spring located in the back or bottom of the bed-piece, operating together substantially as described.

2. In a storm-window fastening; the combination of the fastener B, movable on screws *b b*, operating in slots *c c*, and the friction-spring located in the back or bottom of the bed-piece, substantially as described.

3. In a storm-window fastener, the bed-piece *i*, recessed on its under surface and carrying the beveled hook *h*, in combination with the friction-spring arranged in the back or bottom of the bed-piece, stud *g*, and screws *b b*, substantially as and for the purposes described.

4. In a storm-window fastening, the bed-piece *i*, beveled hook *h*, slots *c*, and screws *b*, in combination with the stud *g*, substantially as described.
- 5 5. A storm - window fastening having a gravity-catch and a friction-spring arranged to hold the catch normally in a given position, substantially as described.
- 10 6. In a storm-window fastening, the movable part B, carrying in a recess thereof the frictional spring *f* and held against the action of gravity thereby in position for applying and removing the storm - window, substantially as described.
- 15 7. The adjustable storm-window fastener consisting, essentially, of the movable part B, frictional spring located in the back or bot-

tom of the bed-piece, and the headed or flanged screws *b b*, substantially as described.

8. In a storm-window fastener, the combination of the movable part B and the headed or flanged screws *b b*, held in frictional contact by the spring *f*, substantially as described.

9. In a storm-window fastening, the bed-piece *i*, beveled hook *h*, thumb-rest *k*, slots *c*, and screws *b*, in combination with stud *g*, substantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES R. MOORE.

Witnesses:

ALEX. M. ANNIS,
HENRY S. ROOT.