

C. G. MAYER, JR. & C. E. STILWELL.

WINDOW FASTENER.

APPLICATION FILED NOV. 18, 1911.

1,066,415.

Patented July 1, 1913.

2 SHEETS—SHEET 1.

Fig. 3.

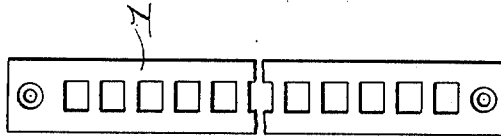
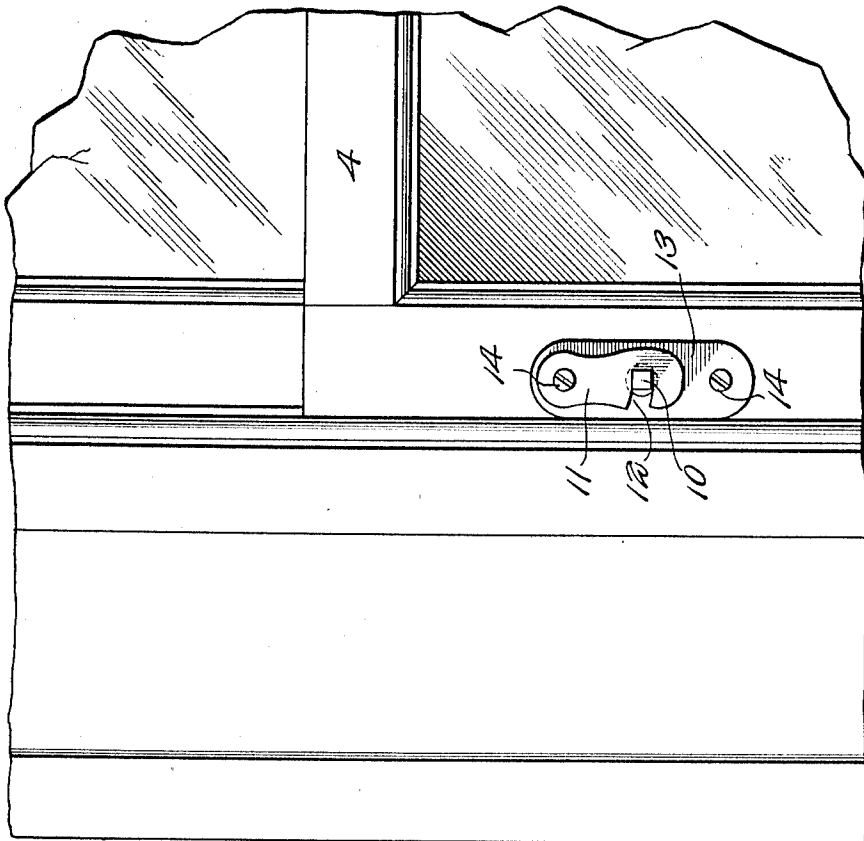


Fig. 1.

Witnesses
Hugh D. Ott.
U. B. Willard.

Inventors
Charles G. Mayer, Jr.
Charles E. Stilwell
By *Victor J. Evans*
Attorney

C. G. MAYER, JR. & C. E. STILWELL.
WINDOW FASTENER.
APPLICATION FILED NOV. 18, 1911.

1,066,415.

Patented July 1, 1913.

2 SHEETS—SHEET 2.

Fig. 2.

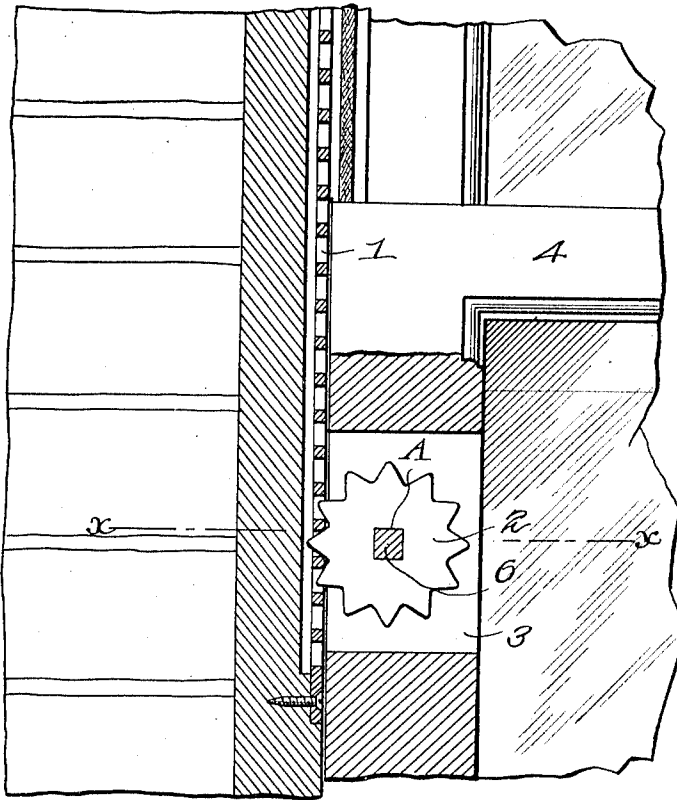


Fig. 4.

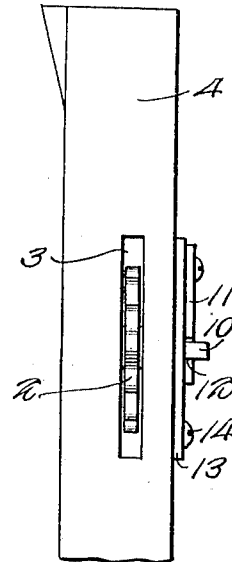
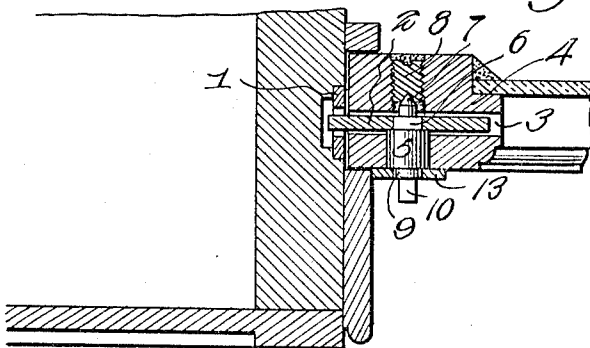


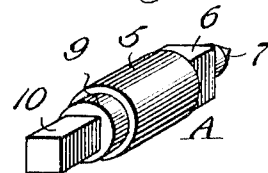
Fig. 5.



Witnesses

Hugh H. Ott
U. B. Hillyard.

Fig. 6.



Inventors

Charles G. Mayer, Jr.,
Charles E. Stilwell

By *Victor J. Evans*

Attorney

UNITED STATES PATENT OFFICE.

CHARLES G. MAYER, JR., AND CHARLES E. STILWELL, OF DURANGO, COLORADO.

WINDOW-FASTENER.

1,066,415.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed November 18, 1911. Serial No. 661,001.

To all whom it may concern:

Be it known that we, CHARLES G. MAYER, JR., and CHARLES E. STILWELL, citizens of the United States, residing at Durango, in the county of La Plata and State of Colorado, have invented new and useful Improvements in Window-Fasteners, of which the following is a specification.

The invention has relation to window-fastenings for securing sash in the desired position against movement in any direction and aims to provide means whereby an upright of the sash is utilized both as a support and housing for such means.

The invention consists of a spindle of peculiar form fitted in a bore of a sash upright, a spur wheel mounted upon the spindle and rotatable therewith and located in a mortise formed in said upright and intersecting the bore thereof, bearing devices attached to the upright and retaining the parts in place, and a catch supported by one of such bearing devices and engaging the spindle to hold it against rotation to fix the position of the sash.

Referring to the drawings, forming a part of the specification, Figure 1 is a front view of part of a window frame and sash provided with fastening means embodying the invention. Fig. 2 is a sectional view, showing the rack and spur wheel coöperating therewith. Fig. 3 is a front view of the rack. Fig. 4 is an edge view of the window sash. Fig. 5 is a section on the line $x-x$ of Fig. 2. Fig. 6 is a detail view of the spindle for the spur wheel.

Corresponding and like parts are referred to in the following description, and indicated in all the views of the drawings, by the same reference characters.

The invention contemplates a rack 1 which is secured to the side of a jamb of the window frame facing the window opening and said rack preferably consisting of a plate or strip provided with a series of openings separated by cross pieces which form the teeth to be engaged by the teeth of the spur wheel 2, which is mounted upon the sash slidably fitted in the window frame.

The spur wheel 2 is located in an opening or mortise 3 formed in an upright of the sash 4 in a manner to leave a portion of the spur wheel projecting so as to engage with the teeth of the rack 1. A spindle A is fitted in an opening formed in an upright of the sash intersecting the opening or mortise

3, said spindle having its body portion 5 made rounded and having an angular portion 6 at one end of the body portion to fit snugly within an angular opening formed in the spur wheel 2, whereby the spindle and spur wheel are caused to rotate. One end of the spindle is reduced slightly and tapered, as indicated at 7, said tapered end entering a conical depression formed in a plug 8 secured within one end of the opening formed in the upright of the sash. The opposite end portion of the spindle has a rounded part 9 and an angular part 10, the latter projecting to be engaged by means of a catch 11 which has pivotal connection at one end with the upright of the sash, said catch having an angular notch 12 to receive the angular end 10 of the spindle A so as to hold said spindle and spur wheel from turning and thereby secure the sash in the required position, either against opening or from further movement in either direction when raised to any desired elevation.

A plate 13 is secured to the upright of the sash and has an opening to receive the rounded part 9 of the spindle, the inner face of the plate engaging the shoulder formed at the base of the rounded part 9, thereby holding the spindle in position. The plate 13 is secured to the upright of the sash by means of screws 14 and by tightening said screws or slipping a washer upon the rounded part 9 of the spindle provision is had for taking up wear, thereby preventing longitudinal movement of the spindle. The plug 8 is of metal and may be secured in place in any manner. The body portion 5 of the spindle may snugly fit within the opening bored in the upright of the sash, thereby supplementing the parts 8 and 13 in supporting the spindle.

When assembling the parts the opening or mortise 3 is formed in the upright of the sash in any way, after which a transverse opening is bored in said upright so as to intersect the opening or mortise 3. The plug 8 is secured in one end of the bore, after which the spur wheel 2 is placed in the opening or mortise 3 in position to receive the spindle A which is slipped into the bore in a manner to admit of the angular portion 6 entering the angular opening of the spur wheel. After the spindle has been properly positioned the plate 13 is placed over the projecting end of the spindle to receive the rounded part 9, said plate being secured by

means of the fastenings 14. The angular part 10 of the spindle projects beyond the plate 13 to be engaged by the notched portion 12 of the catch 11. When the spindle is held by means of the catch 11 the sash cannot be moved up or down. When the sash is to be moved the catch 11 is disengaged from the spindle and movement of the sash causes rotation of the spur wheel and spindle, said parts being turned by the teeth of the spur wheel engaging the teeth of the rack bar 1.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claim appended hereto.

Having thus described the invention what is claimed as new, is:—

A window fastening for a sash having a

mortise and an intersecting bore in an upright thereof, the same comprising a spindle fitted in an end portion of said bore and having its inner end reduced and comprising an angular portion and a tapered extension and having its outer end portion reduced and comprising a rounded part and an angular extension, a plug threaded into the opposite end of the bore and engaging the inner tapered end of the spindle, a spur wheel located in the mortise and fitted upon the angular part of the spindle near the tapered end thereof, a plate secured to a face of the upright and having a round opening to receive the round portion of the spindle adjacent the angular extension, and a catch upon the plate and adapted to engage the angular extension of the spindle to prevent movement thereof in either direction to secure the sash in an adjusted position.

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

CHARLES G. MAYER, Jr.
CHARLES E. STILWELL.

Witnesses:

MACK WRIGHT,
HANS M. RANDOLPH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."