J. F. COLLINS.

Sash-Cord Fastener.

No. 166,503. Patented Aug. 10, 1875.

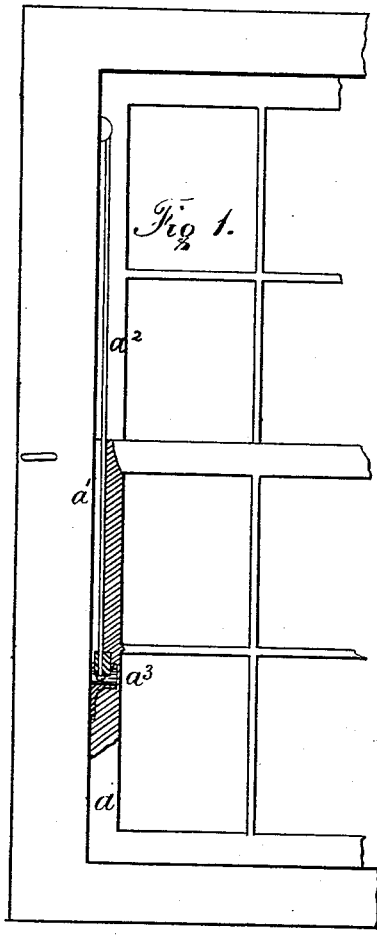

Fig. 1.

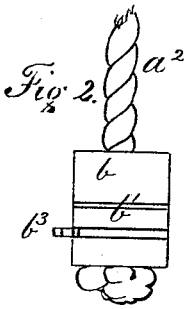

Fig. 2.

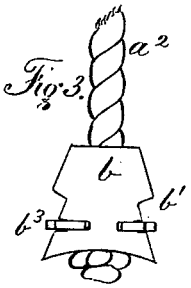

Fig. 3.

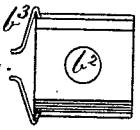

Fig. 4.

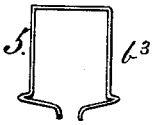

Fig. 5.

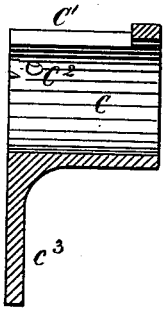

Fig. 6.

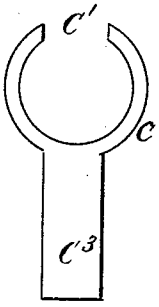

Fig. 7.

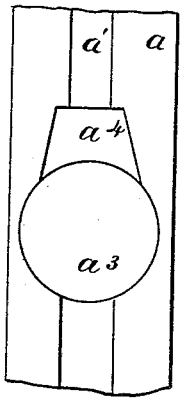

Fig. 9

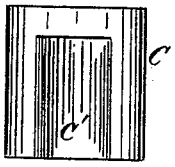

Fig. 8

Witnesses.
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W. H. Pritchett

Inventor.
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R. S. & A. P. Lacey
attorneys.

UNITED STATES PATENT OFFICE.

JAMES F. COLLINS, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN SASH-CORD FASTENERS.

Specification forming part of Letters Patent No. **166,503**, dated August 10, 1875; application filed March 23, 1875.

To all whom it may concern:

Be it known that I, JAMES F. COLLINS, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Sash-Cord Fasteners and Shifters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention has for its object to furnish a cheap, substantial, and convenient device for connecting the ends of the pulley-cords of sash balances or weights with the sash, whereby the latter may be readily and easily detached from said cord, and may be again as easily and readily attached thereto. It consists, chiefly, in a wedge-shaped shifting-block, provided with a vertical central mortise, through which to pass the cord, and which fits into a corresponding mortise formed in the edge of the sash-bar, at the lower end of the channel or groove, which holds and protects the pulley-cord in the upward and downward movements of the sash. It consists, further, in forming the shifting block with side notches or grooves and with springs, and in a hollow shell or holder, inserted in a cross-mortise in the sash, in the top of which is formed a slot or opening for the reception of said block, all of which will hereinafter be fully explained.

In the drawings, Figure 1 is a view of a window sash and casing with my device attached. Figs. 2, 3, and 4 are detail views of the shifting block. Fig. 5 is a view of the retaining-spring. Figs. 6, 7, and 8 are detail views of the shell or holder; and Fig. 9 is an edge view of a portion of the sash-bar, mortised for the reception of my invention.

a is the side or vertical bar of the window-sash, provided with the vertical groove a^1, in which the cord a^2 is held. a^3 is a cross-mortise through the sash; and a^4 is a wedge-shape mortise or recess formed in the sash by widening the lower end of the groove a^1, where the latter connects with the cross-mortise a^3. *b* is the shifting block. It is made wedge shape, as shown, so as to neatly fit in the mortise a^4. Its lower end is extended, and has formed in the sides thereof the horizontal grooves b^1. It has formed through its center the vertical mortise b^2, through which the cord a^2 is passed. It is prevented from dropping off the cord by a knot on the end of the latter, and it has secured to it the side tail-springs b^3.

It will be seen that, when the block is placed in the wedge-shape recess a^4, the weight of the sash will hold it firmly in place, so that the sash can be moved up or down, at pleasure, without fear of becoming detached from the cord; and that, when it is desired to take the sash from the casing of the window, the blocks can be removed from the recesses, and thus detach the sash from the cord.

c is a shell or holder, inserted in the cross-mortise a^3. It is provided with a central opening or slot, c^1, in its top, and with a central opening, sufficiently large to admit the lower part of the block *b* and the knot formed below the block on the end of the cord. Its sides are curved or otherwise turned inward in the formation of the slot c^1, so that the edges fit neatly into the notches or grooves b', and form a bearing on which the block slides in and out of the mortise a^4. It is provided with the small recesses c^2, which catch and hold the springs b^3 when the block is inserted in the slot; and it has the flange or lip c^3, which is let into the wood of sash, and furnishes facilities for inserting retaining-screws.

If the sash were taken from the casing of the window and turned down, so that the entire weight thereof would be thrown on one cord—the latter being at a right angle to the bar *a*—it would not fall from the cord, as the friction of the shell or holder in the grooves or notches b^1 will prevent the withdrawal of the block *b*.

The springs b^3 give greater security against accident in handling the sash. The springs b^3 have their outer ends turned in suitable manner to give facilities for catching them and pressing them, so as to release their hold in the recesses c^2 when it is desired to remove the block from the mortise a^4 and slot c^1.

The grooves b^1 may be formed by cutting rectangular channels across the face of the block, or by sloping off the lower part of the latter below the grooves, and then tapering the edges of the shell or holder, so as to neatly fit against the sloping face, as shown in the drawings.

It will be readily seen that, with my invention, the sash can easily be detached from the pulley-cord, and again as readily attached, thus providing facilities for handling the sash in washing, repairing, or any other desired purposes, free from danger from accident, or the annoyance experienced when the cords are attached in the usual way.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

The sash-cord fastening and shifting device, composed of the block b, having the notches or grooves b^1, mortise b^2, and springs b^3, and the shell or holder c, constructed as described, when arranged and operating substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES F. COLLINS.

Witnesses:
DANIEL TYLER,
W. BURRIS.