(No Model.)

J. C. DUNHAM.

WINDOW.

No. 590,305. Patented Sept. 21, 1897.

Fig. 1

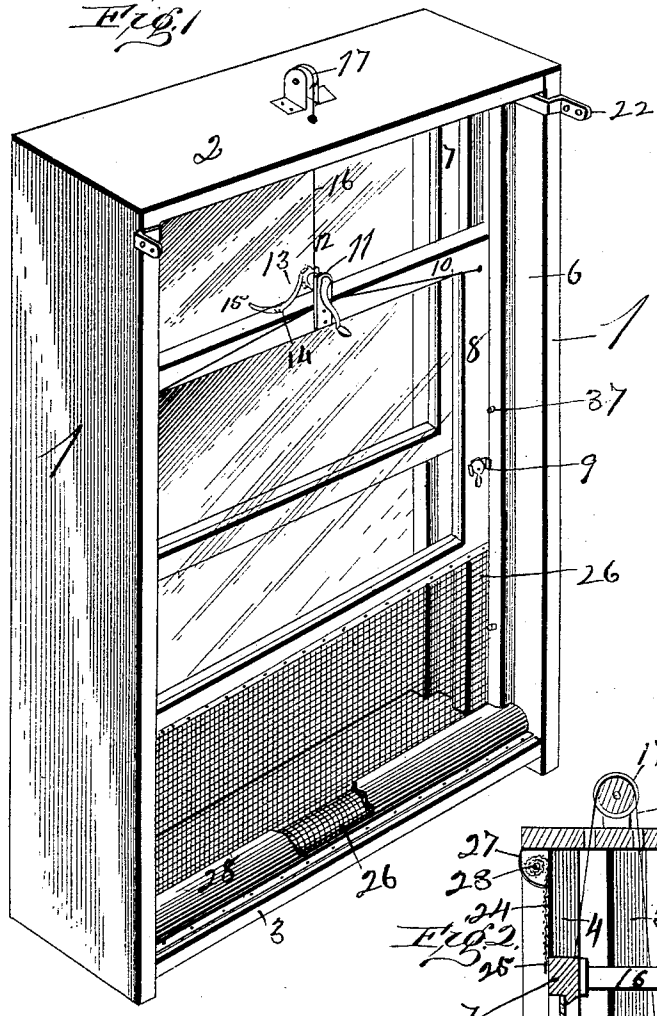


Fig. 2.

Fig. 3

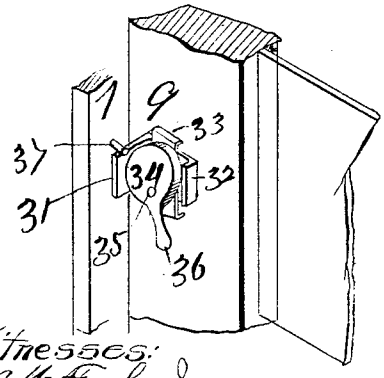


Fig. 4

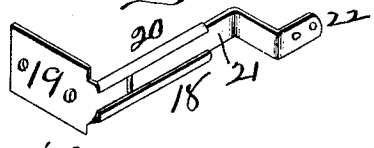
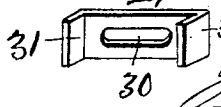


Fig. 5.



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UNITED STATES PATENT OFFICE.

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WINDOW.

SPECIFICATION forming part of Letters Patent No. 590,305, dated September 21, 1897.

Application filed December 22, 1896. Serial No. 616,630. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH C. DUNHAM, a citizen of the United States, residing at Norman, in the county of Cleveland and Territory of Oklahoma, have invented certain new and useful Improvements in Windows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is a window, consisting of a window-frame, sash, sash-braces, windlass, brackets, locks, screens, and screen-protectors, as hereinafter set out in this specification and claims hereto attached.

In the accompanying drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a sectional detail view. Fig. 3 is a detail view showing part of the sash-frame, face of the sash-wall, the lock, and pin. Fig. 4 is a perspective view of one of the curtain-arms, and Fig. 5 is a perspective view of the lock-plate.

My invention is described as follows:

1 are the side walls of the window-frame.

2 is the upper plate and 3 is the lower plate. In the inner faces of these plates are recesses 4, 5, and 6. In the rear recess 4 works the rear sash-frame 7, and in the middle recess 5 works the front sash-frame 8. To each of the sash-frames is secured a lock 9.

Each of the top rails of the sash-frames is provided with a brace 10. The ends of these braces are secured to the side pieces of the sash-frames, and the middle of the same is bent up and secured to the front face of the upper pieces of the sash-frames. This brace is preferably made of strong wire.

To the upper piece top rail of the front sash-frame is secured a windless 11, to the rear end of which is rigidly secured a ratchet-wheel 12. This ratchet-wheel is provided with a dog 13, hinged to the upper bar by a pivot at 14 and provided with the lever-handle 15. Running from this windlass is a cord 16, which passes up through the plate 2 and over a pulley 17, thence down through plate 2, and is secured to the upper cross-piece of the window-sash 7.

By turning the windlass I may raise the lower sash, or I may raise both the upper and lower sash. It just depends upon the way in which I turn the windlass. If I turn the windlass to the right, it raises the lower sash. If I turn the windlass to the right, and thus raise the lower sash a part of the way and lock it, I may then turn the windlass to the left and thus lower the upper sash. When the sashes are adjusted as wanted for the time being, I lock the windlass by means of the ratchet-wheel 12 and dog 13. With the aid of the windlass, ratchet-wheel, dog, and locks my sashes are completely under control.

To the upper cross-piece of the frame 7 I secure an extension arm 18, consisting of the plate-piece 19, sleeve 20, slide-arm 21, window-shade and curtain bracket 22, Fig. 4. The curtain-bracket is provided with two perforations or notches. The inner perforations or notches are to hold the pole to which the blind is secured. The outer perforations or notches are to hold the pole to which the curtain is secured.

When the upper sash 7 is let down, the blind and curtains also come down with it, thus allowing free circulation of air above them, and to prevent insects of any kind from getting in I have secured in the upper portion of the window-frame a spiral-spring window-curtain pole 23, and around this pole is wound a sheet of gauze 24, the lower edge being secured to the upper cross-piece of window-sash 7 at the point marked 25. As the window-sash is pulled down the gauze-sheet unwinds and follows it and thus fills the space left between plate 2 and the upper part of the sash, and as the window is shoved up the gauze sheet is wound up around the pole 23.

To the lower edge of the cross-piece of the window-sash 8 is secured the upper edge of another gauze sheet 26, its lower edge being secured to a pole similar to 23, situated at the lower end of the window-frame. These two gauze sheets when wound up and the rollers on which they are wound are protected by protectors 27 and 28.

The lock 9 consists of a plate 29, provided with a longitudinal slot 30 and flanges 31 and 32, a binding cross-plate 33, and a cam 34, which cam is eccentrically pivoted over the binding-plate 33 by a bolt 35, which passes through a perforation in the said plate 33

and the slot 30. When the handle 36 of the cam is turned to the left, the flange 31 is impinged against the face of the frame 1, and when turned to the right it impinges against the flange 32 and withdraws flange 31 from the face of the frame. By means of this lock the sash may be locked at any distance from the top or bottom.

When I desire to lock the window-sash securely up and down, so that the house cannot be entered from the outside, I use in the window-frame pins 37, one for each lock, and in such position when locked the lower sash will be down and the flange 31 will be under the pin and the upper sash will be up and the flange 31 will be above the pin.

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

1. The combination of the frame 1, 2, 3; sash 7 and 8; braces 10, supporting the upper corners and upper cross-pieces of said sash; windlass 11, secured to the lower sash 8; ratchet-wheel 12; dog 13; and arm 15; cord 16, secured to windlass 11, and passing over pulley 17, thence down and secured to the upper part of sash 7; locks 9, one secured to each sash and pins 37, secured to the window-frame, substantially as shown and described and for the purposes set forth.

2. The combination of the frame 1, 2, 3; sash 7 and 8; braces 10, supporting the upper corners and upper cross-pieces of said sash; windlass 11, secured to the lower sash 8; ratchet-wheel 12; dog 13; and arm 15; cord 16, secured to windlass 11, and passing over pulley 17, thence down and secured to the upper part of sash 7; locks 9, one secured to each sash and pins 37, secured to the window-frame; and extension-arms 18, secured to the upper part of sash 7, substantially as shown and described and for the purposes set forth.

3. The combination of the frame 1, 2, 3; protectors 27 and 28, secured to said frame; sash 7 and 8, carrying the edges of the upper and lower gauze sheets 24 and 26, respectively; braces 10, supporting the upper corners and upper cross-pieces of said sash; windlass 11, secured to the lower sash 8; ratchet-wheel 12; dog 13; and arm 15; cord 16, secured to windlass 11, and passing over pulleys 17, thence down and secured to the upper part of sash 7; locks 9, one secured to each sash, and pins 37, secured to the window-frame; extension-arms 18, secured to the upper sash, substantially as shown and described and for the purposes set forth.

4. In combination with a window, substantially as shown, having the pins 37; locks 9, consisting of the slide-plate 29, having the longitudinal slot 30, and end flanges 31 and 32; binding cross-plate 33; and cam 34, eccentrically pivoted over the binding-plate 33, and between the flanges 31 and 32, by a bolt 35, substantially as shown and described and for the purposes set forth.

5. The combination of the frame 1, 2, 3, having the pins 37; protectors 27 and 28, one secured to the upper and the other to the lower part of said frame; gauze sheets 24 and 26, secured to the sash and frame; locks 9, consisting of the slide-plate 29, having the longitudinal slot 30, and end flanges 31 and 32; windlass 11, as described, secured to the upper cross-piece of the lower sash; cord 16, one end secured to said windlass, the other passing over pulley 17, thence down and secured to the upper part of sash 7, substantially as shown and described and for the purposes set forth.

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

JOSEPH C. DUNHAM.

Witnesses:
SHA GARDNER,
JAMES KEETH.