

No. 687,503.

Patented Nov. 26, 1901.

C. NEMETZ.
WINDOW SCREEN.

(Application filed May 24, 1901.)

(No Model.)

Fig. 1.

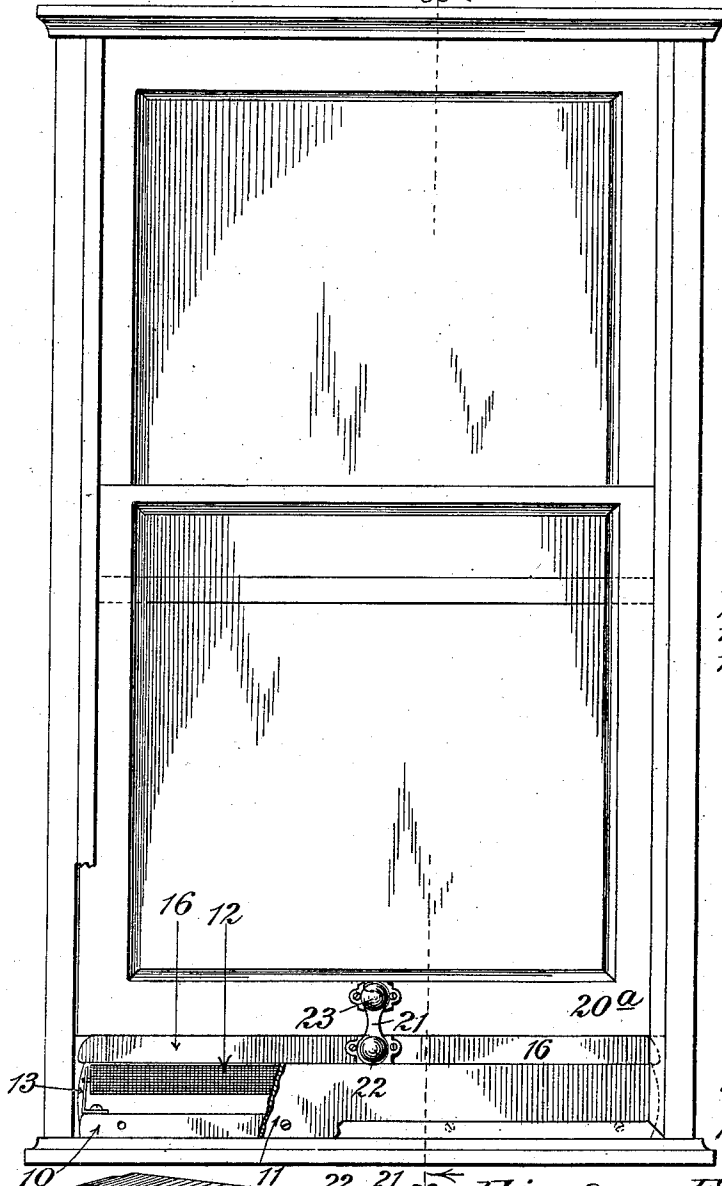


Fig. 2.

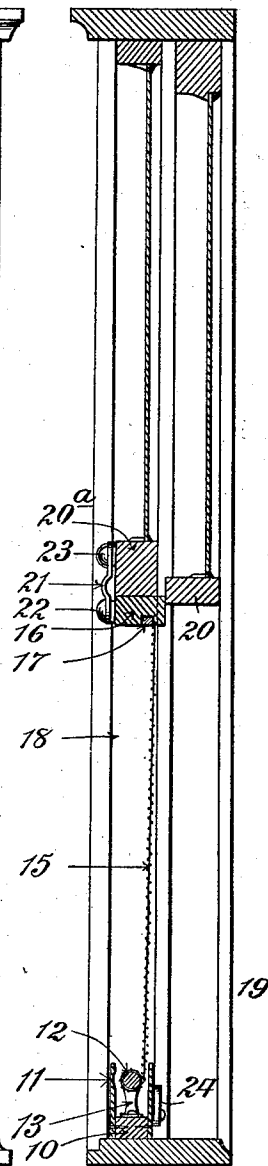


Fig. 3.

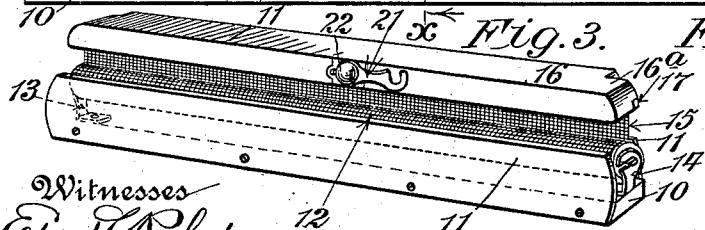
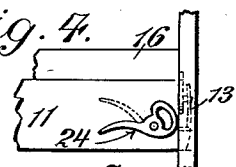


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

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WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 687,503, dated November 26, 1901.

Application filed May 24, 1901. Serial No. 61,688. (No model.)

To all whom it may concern:

Be it known that I, CHARLES NEMETZ, of the city, county, and State of New York, have invented certain new and useful Improvements in Window-Screens, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of window-screens in which the screen is carried by a spring-roller and is made to open and close with the window-sash.

The object of my invention is to produce a very cheap, simple, and reliable window-screen of this kind which can be instantly attached without the use of tools to an ordinary window, which when adjusted can be made to open and close with the window-sash or which can be released, so that the sash may work free and leave an unobstructed window-opening, which has its mechanism concealed, so that the apparatus does not detract from the appearance of the window, which when opened will effect a closure sufficiently tight to exclude insects, at least to as great an extent as the ordinary screen, which in general affords a convenient and efficient screen which can be used or not, as desired, when in position on the window, and which can be used with less difficulty than the ordinary screen.

To these ends my invention consists of certain features of construction and combinations of parts, which will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar characters of reference refer to similar parts throughout the several views.

Figure 1 is a broken inside elevation of an ordinary window with my improved screen attached. Fig. 2 is a vertical section on the line X X of Fig. 1. Fig. 3 is a detail perspective view of the screen apparatus, showing the top bar lifted slightly from the casing; and Fig. 4 is a detail elevation showing how the device is made fast in the window-frame.

In carrying out my invention I use a neat casing to contain the screen-roller and the screen when the latter is rolled up, which casing corresponds in length to the width of the window-opening, and it has a relatively thick bottom portion 10, adapted to fit snugly in the groove of the window-frame, and side

pieces 11, which also are adapted to fit in the said groove. I have shown the side pieces as independent of the bottom; but obviously they may be of one piece, if desired.

The casing above referred to carries the screen-roller 12, which is an ordinary spring-roller, although it should not be provided with catches, but should be simply a spring-roller, opening against the tension of the spring and closing by the spring-pressure; but as this is a very common arrangement I have not shown these details. The roller at one end is journaled in a hanger 13, which is secured to the base or bottom 10 of the screen-casing, and at the other end the pintle of the screen is held in the usual slotted hanger 14.

The screen 15 may be of any usual material—such as screen-cloth, wire-cloth, &c.—and at one end it is secured to the roller 12 and at the other end it is made fast to the top bar 16, which is adapted to be fastened to the window-sash, as hereinafter described, and which is adapted to slide up and down with the sash. To this end the ends of the top bar 16 are reduced slightly, as shown at 16^a in Fig. 3, so that the bar may slide freely in the grooves 18 of the window-frame 19, while the middle portion of the bar is wide enough to abut with the bottom cross-bar of the upper sash 20 when the window is opened wide, and thus close any opening between the sashes.

The screen may be attached to the bar 16 in several ways; but a neat and secure way is illustrated, in which the bar is grooved on the under side and fitted with a bead 17 and the end of the screen is clamped between the bead and the cross-bar 16 by simply pressing the bead into its groove with the free edge of the screen laid over the said bead. The bead may then be fastened in any convenient way.

The top bar 16 is detachably secured to the bar of the lower sash 20^a, and this means of attachment must be such as will permit the easy disengagement of the screen apparatus and the sash-bar, so that the sash may be made to run free and leave the window open, if desired. I have shown one fastening arranged centrally of the window-sash, but more can be used, or this particular fastening can be departed from without affecting the invention in any way. As illustrated, a latch 21 is used, which is pivotally secured at one

end, as shown at 22, to the top bar 16 and which at the other end is formed into a hook to engage the button 23, which is made fast to the sash.

5 It will be seen that when the apparatus is in use the casing must be held down rigidly to the window-sill, and to this end a fastening device 24 is used, which is of a common kind, and, as shown, is the usual cam-lever, 10 pivoted on the side wall 11 of the casing and adapted to engage the window-frame. A fastening of this kind may be used at each end of the casing, if desired, or other fastenings may be used; but I wish to emphasize the fact 15 that some easily-manipulated and manually-operated means must be employed for fastening the casing in the window-frame and for securing the top bar 16 to the window-sash, as by so doing the parts can be so easily ad- 20 justed and the window can be so nicely and quickly made to run free or to raise the screen when the window is opened.

Usually the screen 15 is tight enough and taut enough to prevent insects from getting 25 in around the side edges; but if for any reason the joint is a little loose at these points the screen may be provided with a selvage.

To fasten the device in place, it is simply inserted in the window-groove 18, with the 30 screen rolled up and the top bar 16 lying snug upon the top of the casing 10 11, and the casing is made fast by means of the fastening device 24. Then the top bar 16 can be placed in engagement with the sash 20^a by simply 35 turning the latch 21, so that it will engage the button 23, which has been fastened to the sash. If now the window-sash is opened, it will be seen that the screen will be unwound against the tension of the spring-roller 12, 40 and as the window is closed the spring winds up the screen as fast as the window closes, so that the screen is always tight without reference to the height that the window-sash is raised. When the window is closed, no part 45 of the screen or screen apparatus shows except the casing, and if the latch 21 is released the window-sash runs free and the window has substantially the appearance of the usual

screenless window. Moreover, it will be observed that the screen may be released by 50 simply touching the latch 21, and thus the window can be made conveniently to run free, which is quite an important matter.

From the foregoing description it will be seen that my improved device is rendered 55 very simple, that it can be easily attached to any ordinary window, and that it makes a very reliable screen.

Having thus described my invention, what I claim as new, and desire to secure by Letters 60 Patent, is—

1. An apparatus of the kind described, comprising an open-topped casing, shaped to fit the groove of a window, a manually-operated 65 device to fasten the casing to the window-sill, a top for the casing, said top having a manually-operated device by which it may be secured to the rail of a window-sash, the top having its middle portion relatively wide, so as to close the space between the two sashes 70 of a window, and its ends reduced to a slide in the window-groove, a spring-roller held in the casing, and a window-screen having one end secured to the roller and the opposite end fastened to the top of the casing. 75

2. An apparatus of the kind described, comprising an open-topped casing having a bottom and two sides, the said casing being shaped to fit in the groove of the window-frame, a releasable fastening device to secure 80 the casing to the window-sill, a top for the casing, the said top having its ends shaped to fit the window-grooves and its middle portion widened so as to close the space between the upper and lower sashes, a releasable fast- 85 ening device to secure the top of the casing to the sash-rail, a spring-roller in the casing, and a screen having one end attached to the roller and the other to the casing-top.

In testimony whereof I have signed my 90 name to this specification in the presence of two subscribing witnesses.

CHARLES NEMETZ.

Witnesses:

WARREN B. HUTCHINSON;
THERON DAVIS.