

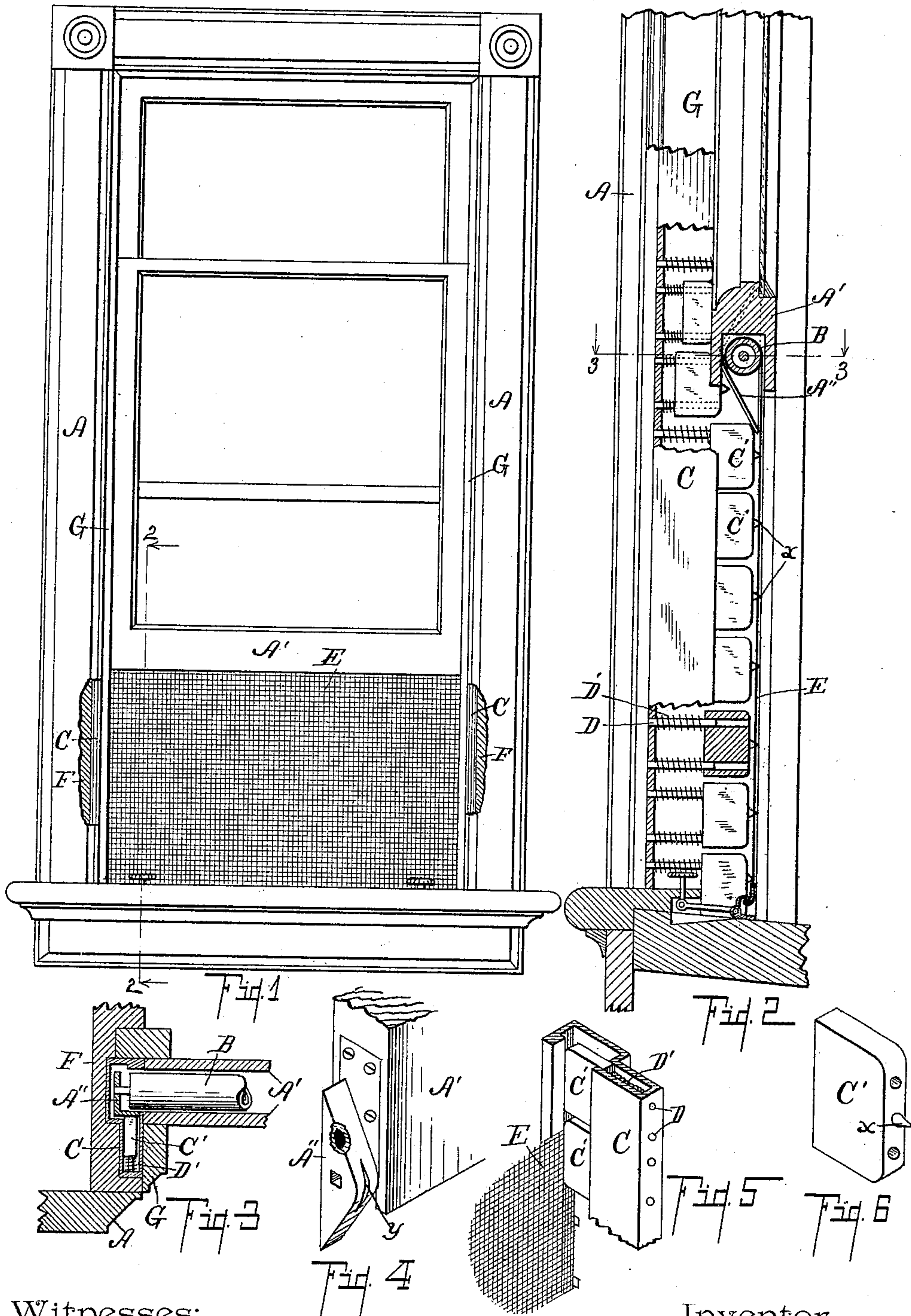
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Patented Feb. 7, 1899.

T. E. BARR.
WINDOW SCREEN.

(Application filed July 14, 1898.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

THOMAS E. BARR, OF KALAMAZOO, MICHIGAN.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 618,829, dated February 7, 1899.

Application filed July 14, 1898. Serial No. 685,957. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. BARR, a citizen of the United States, residing at the city of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification.

My invention relates to improvements in roll window-screens, and particularly to a construction of roll window-screen in which the roller is situated in the window-sash.

The objects of my invention are to provide a positive means of holding the edge of the screen when the window is open and the screen in place and to provide such a means so constructed that it shall not interfere with the operation of the window-sash, and further objects appearing in the detailed description. I accomplish the objects of my invention by the means described in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is an inside elevation of a window with my improved screen in place, portions of the window-casing being broken away to show details of construction. Fig. 2 is an enlarged detail sectional view on line 2 2 of Fig. 1. Fig. 3 is a detail sectional view on line 3 3 of Fig. 2. Fig. 4 is an enlarged detail perspective view of the lower corner of the sash. Fig. 5 is an enlarged detail perspective view of a portion of the means for securing the edge of the window-screen in place. Fig. 6 is an enlarged detail perspective view of one of the retaining-bodies, showing the detaining-pins on its face.

In the drawings all of the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, A represents the window-casing, and A' the window-sash, the bottom of which is grooved out to receive the screen-roller B. This roller projects out beyond the end of the sash and is supported in a suitable hanger A'', which is formed with a double incline, pointing both up and down. The window-frame F is grooved out, and a casing C is inserted back of the window-stop G. The casing is

open opposite the projecting blocks A'', so that it may reciprocate up and down within the same freely. In a groove of the casing C, which projects under the stop G, is supported a series of movable blocks C', which are pressed normally toward the sash by coiled springs D' on pins D, which project into the blocks. The corners of the blocks toward the sash are rounded, so that the double incline A'' will pass freely between them and the inner stop. Little projecting points *x* are on the faces of the blocks C'. The screen is carried by the roller, and the outer end of it is secured by proper means to the bottom of the window-frame. As the window-sash is raised or lowered the double-inclined wedge-shaped portion A'' slides between the bodies C' C' and crowds them toward the outer casing of the window, which permits the end of the roller to pass freely up and down between the same and the inner window-stop. The apex of the double-inclined body A'' is grooved at *y* for the passage of the pins *x* on the bodies C' to permit the same to pass freely without injury to the pins.

Having thus specifically described my improved window-screen, I desire to state that it is capable of considerable variation in its details without departing from my invention. The bodies C' will be found to hold the edge of the screen quite securely if they are not provided with the sharp points *x*; but they are so constructed that the sharp points can be used in this connection and hold the edge of the screen doubly secure. The exact length of the bodies C' can be greatly varied, and two bodies or only one can be used in this position in a very satisfactory manner, it of course making it imperative that the window be raised the length of one of the bodies in order that it may be allowed to close upon the screen and retain it. If the corners of the bodies C' were more rounded and beveled, there might be no necessity of making the part A'' wedge-shaped. The construction I have shown, however, is much to be preferred to any of these possible variations suggested.

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

1. In a window-screen, the combination of a

window-sash grooved at the bottom; a spring-actuated screen-roller within said groove projecting at each end; suitable hangers A'', with an inclined surface at top and bottom projecting from the sash; a shell-casing C, supported in the window-frame at each side of the sash with openings for the passage of the projecting hangers A'', bodies C', with rounded corners supported in said casing; pins x, on said bodies; coiled springs D', on pins D, that project into said bodies to hold them normally toward the sash; all coacting substantially as described for the purpose specified.

2. In a window-screen the combination of a window-sash grooved at the bottom; a spring-actuated screen-roller within said groove projecting at each end; suitable hangers A'', projecting from the sash with an inclined surface at top and bottom; a shell-casing C, supported in the window-frame at each side of the sash with openings for the passage of the pro-

jecting hangers A'', bodies C', with rounded corners supported in said casing; coiled springs D', on pins D, that project into said bodies to hold them normally in contact with the edge of the screen as specified. 25

3. In a window-screen the combination of the window-sash; a spring-actuated roller supported thereon; projecting to each side; a hanger at each end to support said roller with a double-inclined surface; spring-actuated bodies supported in the window-frame to engage the edge of the screen in position to be depressed when the hangers pass, all coacting as specified. 30

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses. 35

THOMAS E. BARR. [L. S.]

Witnesses:

OTIS A. EARL,
LELA M. BROWN.