

L. RICARD.
WINDOW SCREEN.
APPLICATION FILED JULY 21, 1916.

1,222,137.

Patented Apr. 10, 1917.

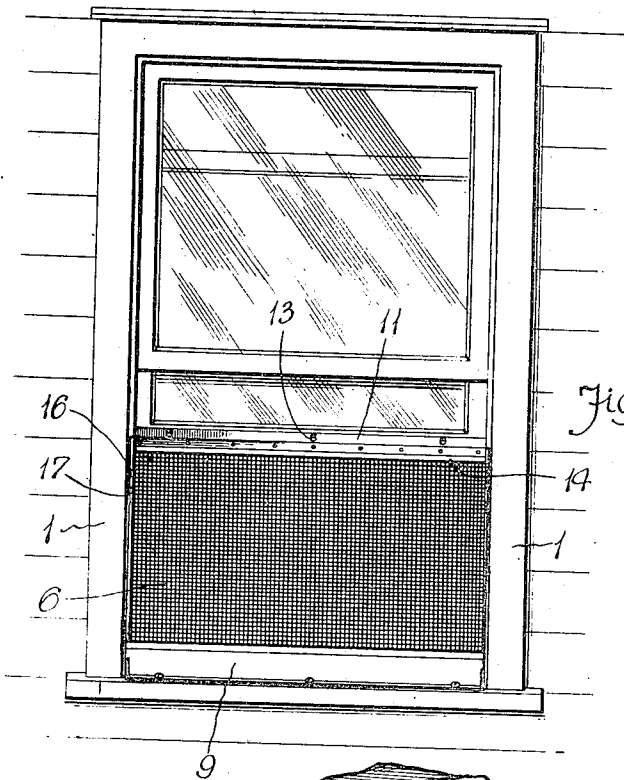


Fig. 1.

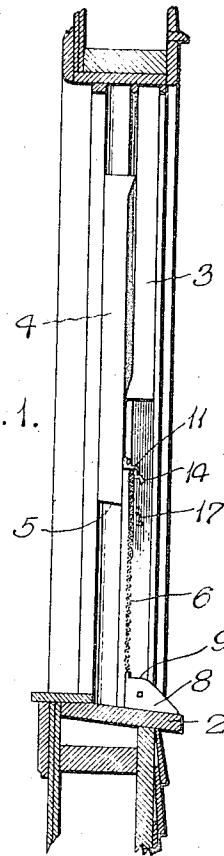


Fig. 2.

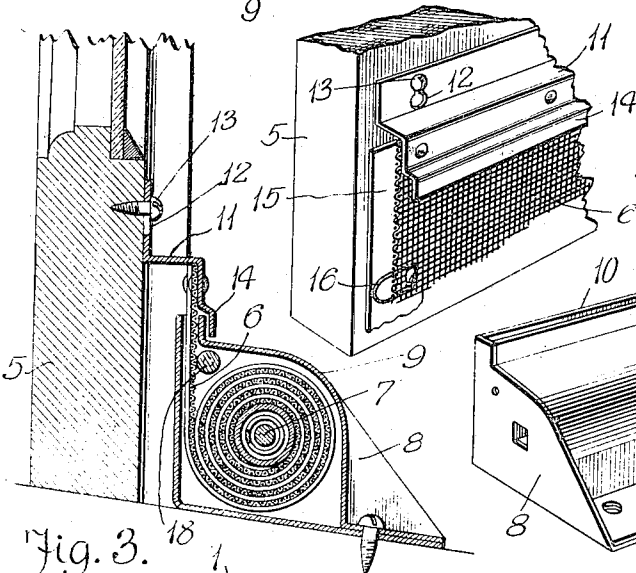


Fig. 3.

Fig. 4.

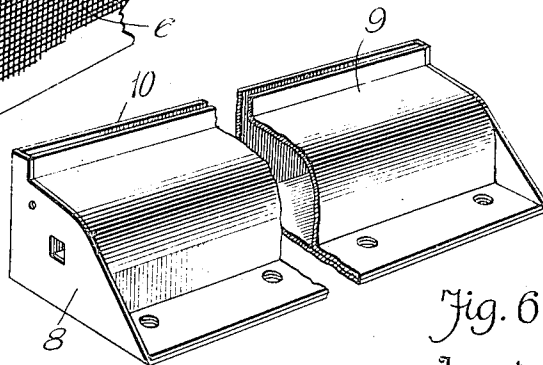


Fig. 6.

Witness
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Fig. 5.

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UNITED STATES PATENT OFFICE.

LOUIS RICARD, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO TELESPHORE ST. DENIS, OF WINDSOR, ONTARIO, CANADA.

WINDOW-SCREEN.

1,222,137.

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To all whom it may concern:

Be it known that I, LOUIS RICARD, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to window screens and the primary object of my invention is to furnish a window sill or frame with a rollable fly screen adapted to be unrolled or raised simultaneously with a window sash and restored to a rolled or normal position by a spring axially of the screen and constructed somewhat upon the principle of an ordinary curtain shade roller. The above object, as outlined, is attained by suitably securing a casing to the sill of a window frame and placing a spring roller in said casing to hold a flexible rollable screen, either in the form of wire or fabric.

A further object of my invention is the provision of novel means in connection with a window frame whereby a screen of the above type may be disconnected from a sash and supported in an unrolled or raised position, independent of the sash, to completely dry out after having been subjected to the action of rain.

The above and other objects are attained by structural details that will be hereinafter referred to and then claimed, and reference will now be had to the drawing, wherein—

Figure 1 is a front elevation of a window frame provided with a screen in accordance with my invention; showing the sash raised and the screen connected thereto;

Fig. 2 is a vertical sectional view of the window frame showing the sashes and screens in side elevation;

Fig. 3 is an enlarged vertical sectional view of the window sash showing the window screen attached thereto;

Fig. 4 is a perspective view of a portion of the same;

Fig. 5 is a horizontal sectional view of a portion of the window frame showing the manner in which the screen strips or binders engage stiles of the window frame, and

Fig. 6 is a perspective view of a portion of a screen casing.

In the drawing, 1 denotes stiles of a window frame and associated therewith is a

sill 2 and sashes 3 and 4, the latter having a bottom rail 5 to which is connected, detachably and indirectly, a flexible rollable screen 6. As heretofore mentioned the screen may be made of wire or fabric netting and the screen is wound upon and attached to a spring roller 7. This roller has the pintles thereof supported by end walls 8 of a metallic casing 9, said casing being mounted on and secured to the sill 2 of the window frame. The casing 9 is preferably made of non-corrodible sheet metal pressed and shaped to house the screen 6 and said casing has a longitudinal slot or opening 10 in which the screen 6 extends for attachment to the bottom rail 5 of the lower sash 4. The outer end of the screen 6 is connected to the inner side of a Z bar 11, said bar having the upper edge thereof provided with key hole shaped openings 12 and these openings permit of the Z bar being detachably mounted on screws or studs 13 carried by the bottom rail 5. By simply raising the Z bar 11 relative to the bottom rail 5, the screen may be disconnected from the lower sash and said sash raised and lowered independently of the screen.

The Z bar 11 has the lower edge thereof offset, as at 14 to hang over the slot 10 of the casing 9 and prevent rain and foreign matter from entering said casing, especially when the lower sash is closed.

On the longitudinal edges of the screen 6 are strips or binders 15 that ride against the stiles 1 of the window frame, as best shown in Fig. 5, and cooperate with the screen in closing the opening incurred by raising the lower sash 4. Adjacent the upper or outer ends of the strips 15 are loops or eyes 16 adapted to receive hooks 17 carried by the stiles 1. The hooks 17 are adapted to support the screen 6, raised or unwound, independent of the sash 4. Low grades of wire fabric will rust and rot when wound up in a wet condition, but by attaching the screen to the hooks 17, the lower sash 4 may be closed and the screen allowed to remain in a raised position to dry off before being wound upon the roller 7. The use of the hooks 17 and the loops or eyes 16 are a distinct advantage when netting or any light fabric is used for screening purposes.

Since the diameter of the screen roll will decrease as the screen is raised or unwound,

the casing 9 is provided with a guide roller 18 adjacent the slot 10, said roller maintaining the screen in a vertical plane as it is unwound or raised.

- 5 It is thought that the utility and operation of the window screen will be apparent without further description, and while in the drawing there is illustrated a preferred embodiment of my invention, it is to be understood that the structural elements are susceptible to such variations and modifications as fall within the scope of the appended claim.

What I claim is:—

- 15 The combination with a window frame having a sill, stiles and a sash, of a casing on said frame sill provided with a longitudinal slot at the upper inner edge thereof, a normally wound-up screen in said casing

and having an end thereof extending 20 through the slot of said casing, a guide roller in said casing at the slot thereof and maintaining said screen out of contact with the walls of the slot of said casing, a Z bar detachably connected to said sash and per- 25 manently attached to said screen, said Z bar having an offset portion extending over and in front of the front wall of the slot of said casing, and hooks carried by said stiles adapted to engage said screen and hold said 30 screen unwound independently of said sash.

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

LOUIS RICARD.

Witnesses:

ANNA M. DORR,
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