No. 889,064. PATENTED MAY 26, 1908.

F. E. TAYLOR.

WINDOW SCREEN.

APPLICATION FILED OCT. 21, 1907.

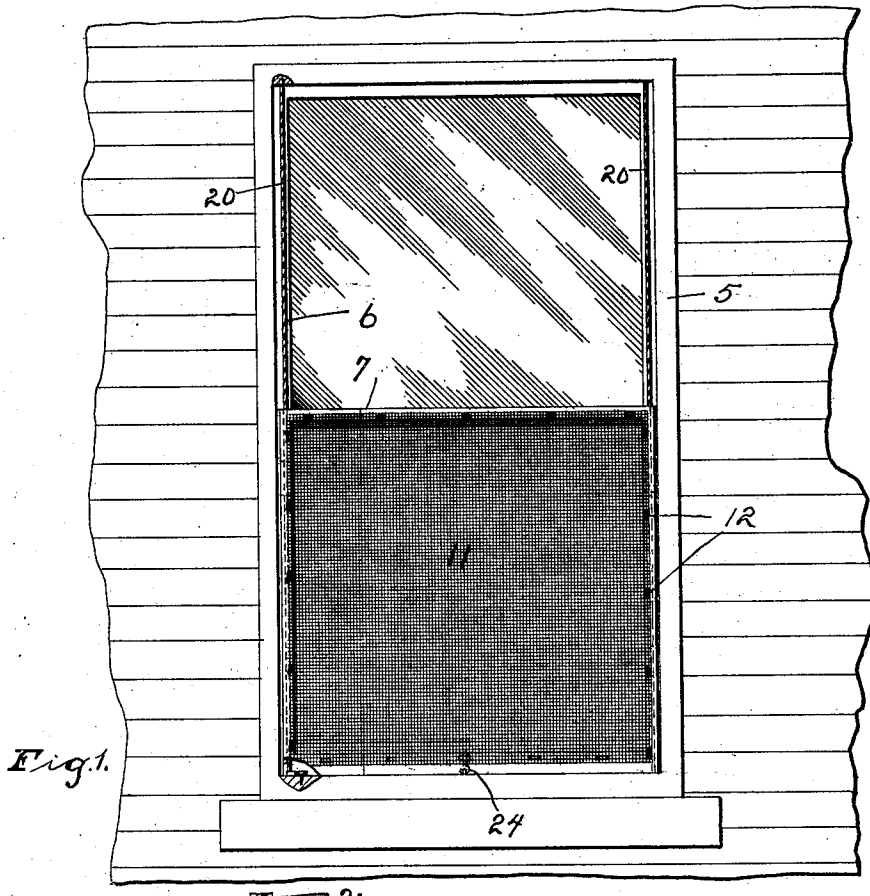


Fig. 1.

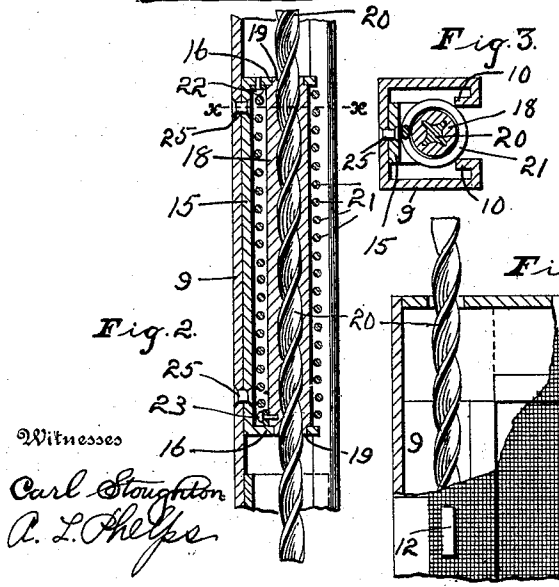


Fig. 2.

Fig. 3.

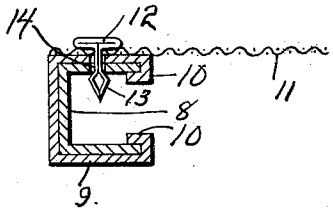


Fig. 4.

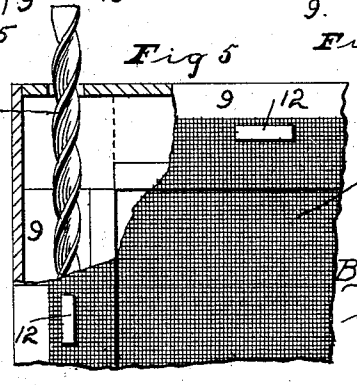


Fig. 5.

Witnesses
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UNITED STATES PATENT OFFICE.

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WINDOW-SCREEN.

No. 889,064. Specification of Letters Patent. Patented May 26, 1908.

Application filed October 21, 1907. Serial No. 398,350.

To all whom it may concern:

Be it known that I, FRANCIS E. TAYLOR, citizen of the United States, residing at Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification.

My invention relates to window screens and has for its object the provision of a device of this character constructed in such manner that when the screen is pulled down, a spring will be placed under tension in such manner that when the screen is released, it will automatically travel upwardly.

A further object of the invention is the provision of improved means for securing the screen fabric to the screen frame.

A further object of the invention is the provision of an improved screen frame, the width of which is adjustable both vertically and horizontally.

Further objects and advantages of the invention will be set forth in the detailed description which now follows.

Figure 1 is an elevation looking from the outside of a window and illustrating this improved screen in position upon said window, Fig. 2 is a vertical section through a portion of the screen frame, Fig. 3 is a horizontal section upon line *x*—*x* of Fig. 2, Fig. 4 is a sectional view through one of the side members of the screen frame, and, Fig. 5 is a view partially in elevation and partially in section of the upper corner of the screen frame.

Like numerals designate corresponding parts in all of the figures of the drawing.

Referring to the drawing, the numeral 5 designates the window frame, the numeral 6 designates the upper window sash and the numeral 7 designates the lower window sash. The screen frame is composed of substantially U-shaped members 8 which slide into members of like shape 9, these latter members having overturned flanges 10 adapted to engage around the edges of the legs of the U-shaped members 8. It will therefore be seen that the members 8 are slidably disposed within the members 10, by virtue of which construction it is possible to adjust the screen frame both vertically and laterally to fit windows of varying sizes.

The screen fabric 11 is held in position by buttons 12. These buttons carry bowed prongs 13 which are forced through the screen fabric 11 and through openings 14 of the menbers 8 and 9. It will therefore be seen that the sceren fabric is removably held in position upon the screen frame so that if it be desired to remove the screen fabric when the screen frame is to be adjusted to a window of different size, these removable buttons will readily permit this to be done.

Mounted in the members 9 upon each side of the window, are bearing members which comprise vertical portions 15 and horizontal ears 16. Sleeves 18 are provided with reduced ends 19 and these reduced ends are journaled in the ears 16. The interior of the sleeves 18 conform to the shape of spiral rods 20. It will therefore be seen that as the screen is pulled downwardly and the sleeves 18 are caused to travel along the spiral rods, rotation will be imparted to these sleeves, it being understood that the spiral rods are fixed to the window frame at their upper and lower ends in such manner as to hold them against rotation.

Coiled springs 21 are secured at one end to the sleeves 16 by a screw or rivet 22 and at their opposite ends are secured to the sleeves 18 by screws or rivets 23. When rotation is imparted to the sleeves 18, the coiled spring is placed under tension by being wound upon these sleeves. A catch 24 is carried by the lower edge of the screen and is adapted to hold the screen in its lowermost position. When this catch is released, it is apparent that the springs will act to rotate the sleeves 18 and that these sleeves will by such rotation travel up the spiral rods carrying the screen with them.

The vertical portions 15 of the bearing members being secured to the screen frames by rivets 25, it is apparent that by winding the springs upon the sleeves 18 in the opposite direction, these springs will act to force the screen downwardly instead of acting to raise it and the operator will then raise the screen against the tension of the springs and the springs will automatically act to close the screen whenever the screen is released.

It is to be understood that this invention is not limited to the precise construction set forth, but includes within its purview such changes as may be made within the scope of the appended claims.

What I claim, is:

1. In a device of the character described, the combination with a screen frame, of a

spiral rod located at each side of said screen frame, sleeves carried by the screen frame and adapted to travel upon the spiral rods, and springs connected to said sleeves and adapted to be placed under tension when said sleeves are rotated by being moved along said spiral rods.

2. In a device of the character described, the combination with a screen frame, of bearing members carried by said screen frame, rotative sleeves carried by said bearing members, springs connected at one end to said sleeves and at their opposite ends to the screen frame, and fixed spirally grooved rods with which said sleeves are adapted to engage.

3. In a device of the character described, the combination with a screen frame, of bearing members carried by said screen frame, rotative sleeves carried by said bearing members, springs connected at one end to said sleeves and at their opposite ends to the screen frame, fixed spirally grooved rods with which said sleeves are adapted to engage, a screen fabric, and means for removably securing said screen fabric to the screen frame.

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

FRANCIS E. TAYLOR.

Witnesses:

A. M. GARDNER,

THOS. F. SWAIN.