M. CUNNINGHAM.

WINDOW SCREEN.

APPLICATION FILED MAR. 24, 1915.

1,175,345. Patented Mar. 14, 1916.

Fig. 1

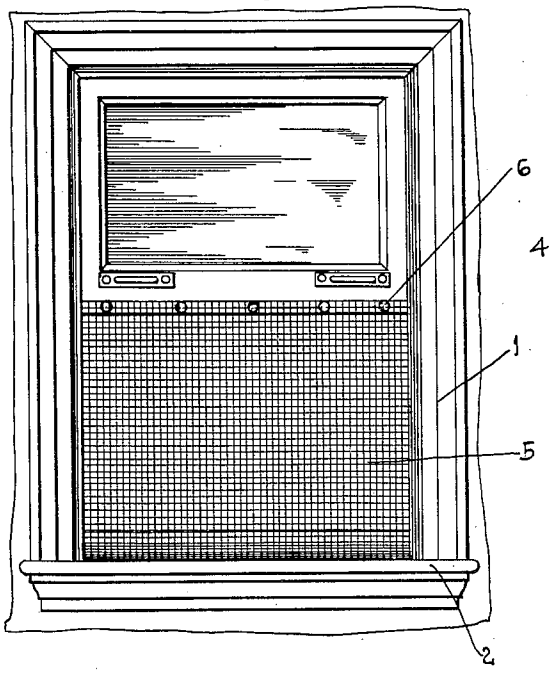


Fig. 2

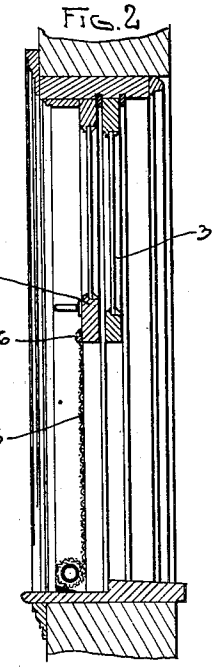


Fig. 3

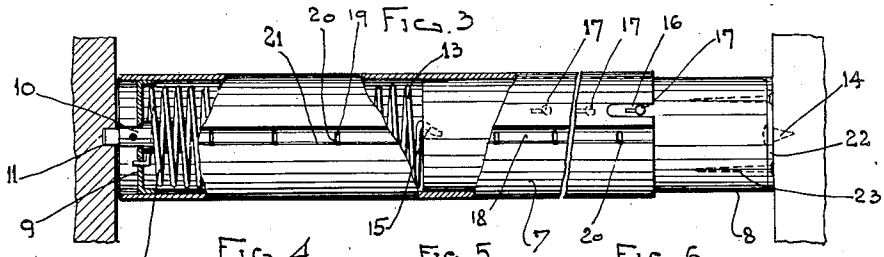


Fig. 4

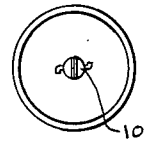


Fig. 5

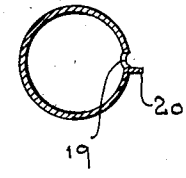
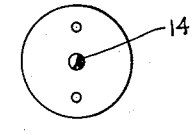


Fig. 6



WITNESSES

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WINDOW-SCREEN.

1,175,345. Specification of Letters Patent. Patented Mar. 14, 1916.

Application filed March 24, 1915. Serial No. 16,590.

To all whom it may concern:

Be it known that I, MERLE CUNNINGHAM, a citizen of the United States, residing at St. Benedict, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification.

This invention relates to window screens and has for its object to provide means, in a manner as hereinafter set forth, to constitute a screen roller capable of being adjusted to fit different widths of windows and to further provide a roller of the spring type whereby the screen will be automatically wound up when a window sash is lowered.

Further objects of the invention are to provide a window screen having as an element thereof, in a manner as hereinafter referred to, a spring roller for winding up the screen and the providing of the roller with self inherent means for connecting the screen thereto.

Further objects of the invention are to provide a window screen which is simple in its construction and arrangement, strong, durable, efficient, readily set up with respect to the window frame and comparatively inexpensive.

With the foregoing and other objects in vew the invention consists of the novel construction, combination and arrangement of parts, as hereinafter more specifically described and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:—Figure 1 is an elevation of a window showing the adaptation thereof of a window screen in accordance with this invention. Fig. 2 is a vertical sectional view of a window frame with a screen, in accordance with this invention, connected to the lower sash. Fig. 3 is a sectional plan. Fig. 4 is an end view of a screen or roller. Fig. 5 is a cross sectional view of one of the sections of the screen roller. Fig. 6 is a view looking toward the other end of the roller.

Referring to the drawings in detail 1 denotes a window frame, 2 the sill, 3 the upper sash and 4 the lower sash. The screen body which is formed of a foraminous sheet of flexible material, is indicated at 5 and which has its free end connected by the hold fast devices 6 to the bottom rail of the lower sash. The screen roller consists of a pair of telescopic sections 7, 8, respectively. The section 7 is formed preferably of metallic material and is cylindrical in contour. One end of the section 7 has arranged therein a disk 9, carrying a square pintle 10, which is seated in a pocket 11 formed in one side of the window frame 1. The pintle 10 extends through the disk 9 and has one end of a coil spring 13 fixed thereto. The disk 9 and pintle 10 are stationary. The section 8 extends into the section 7 and is preferably constructed of wood and has secured thereto a pintle 14 which rotates in one side of the frame 1. The inner end of the section 8 has fixedly secured thereto as at 15 the other end of the spring 13.

To prevent the section 8 from rotating, the latter has a notch 16 in which engages a lug 17 carried by the section 8 and the latter is provided with a series of lugs which can be elevated so as to engage the notch 16 to provide for the non-rotation of the section 8 with respect to the section 7 when the section 8 is extended so that the screen roller will fit different widths of window frames.

The section 8 is forced against the side of the frame by the spring 13 and the latter also constitutes means for revolving both sections 7, 8, simultaneously when the section 8 is coupled to the section 7 by the lug 17 engaging in the notch 16.

The section 7 has a depressed portion 18 and said depressed portion at various points throughout its length is slitted as at 19 to provide bendable tongues 20, and which are utilized for securing the lower end of the screen body to the section 7.

If the width of the window is such that it requires a wider screen body than the length of the section 7, then that portion of the screen body which extends upon the section 8 is secured thereto by any suitable hold fast device or devices.

The pintle 14 of the section 8 is carried by a plate 22 which is secured by the hold fast devices 23 to the outer end of the section 8.

When the screen roller is in position it is arranged in proximity to the sill 2, in a

manner as illustrated in Fig. 2, whereby, as the screen body 5 is secured to the sash 4, it is obvious that when the sash is elevated the screen body will be pulled upwardly and the openings formed by the raising of the sash will be screened. When the sash is lowered the spring 13 will automatically wind the screen body upon the roller.

What I claim is:—

1. A window screen comprising a screen body, a longitudinal adjustable and spring controlled roller for winding said screen body thereon, said roller having a depressed portion slitted throughout its length to provide bendable tongues for connecting one end of the body to the roller.

2. A window screen comprising a screen body, a longitudinal adjustable and spring controlled roller for winding said screen body thereon, said roller including a pair of telescopic sections having associated means for detachably connecting the sections together whereby they will rotate simultaneously, one of said sections having a longitudinally extending depressed portion slitted throughout its length to provide bendable tongues for connecting one end of the screen body to the roller.

3. A window screen comprising a screen body, a longitudinal adjustable and spring controlled roller for winding said screen body thereon, said roller including a pair of telescopic sections, one of said sections having inherent means for connecting one end of a screen body thereto, said sections further having associated means to provide for the simultaneous rotation of the sections, and said sections further having associated means to prevent the rotation of one section with respect to the other.

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

MERLE CUNNINGHAM.

Witnesses:

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