July 18, 1950 N. HAMMER 2,515,708

WINDOW SCREEN

Filed July 30, 1946 2 Sheets-Sheet 1

Fig. 1.

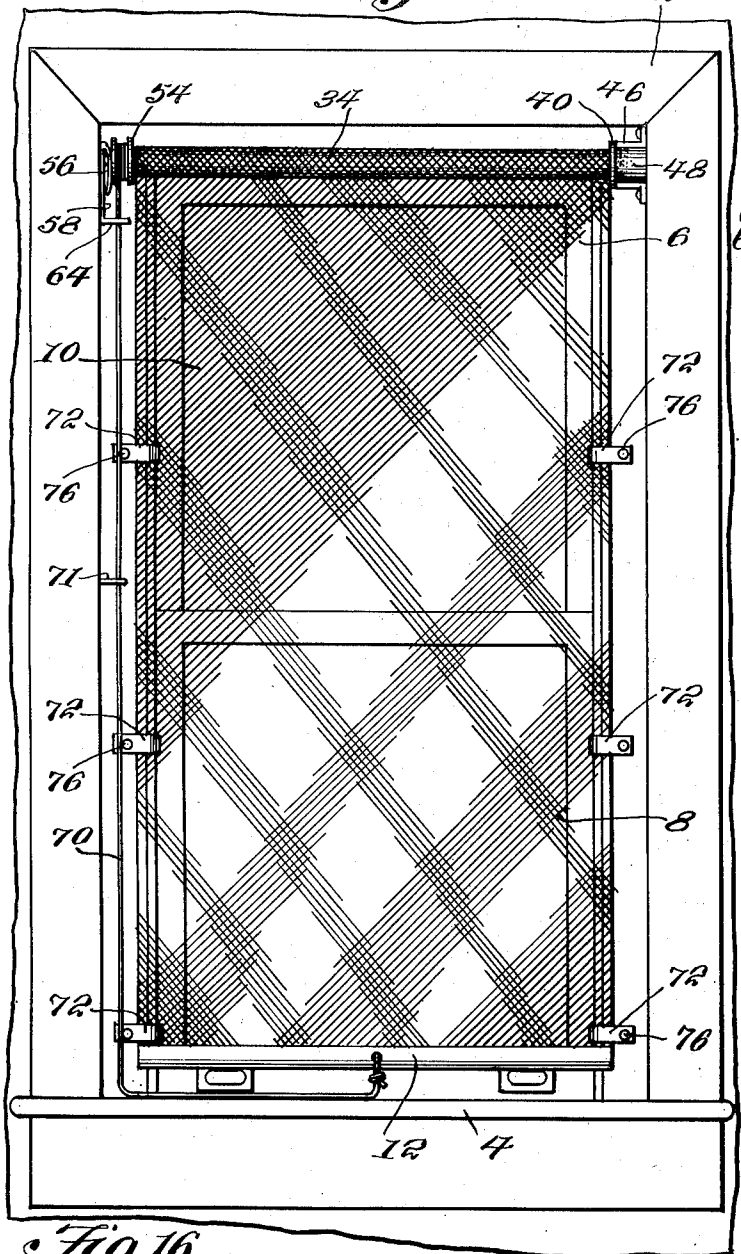


Fig. 2.

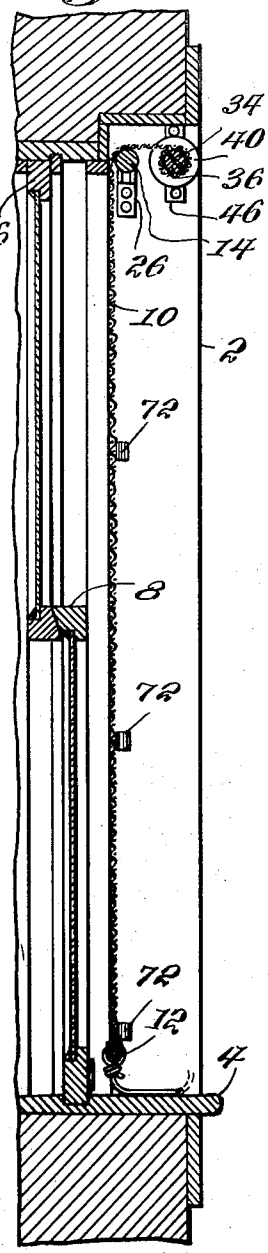


Fig. 16.

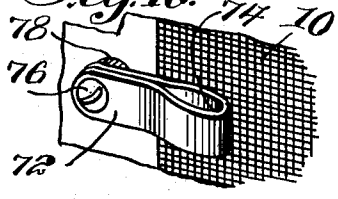
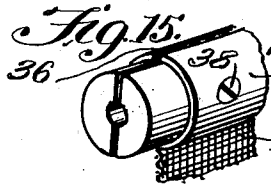


Fig. 15.

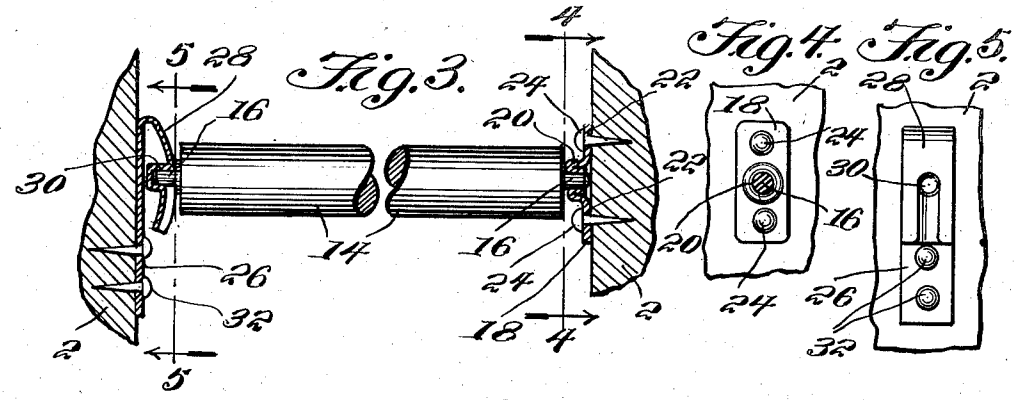


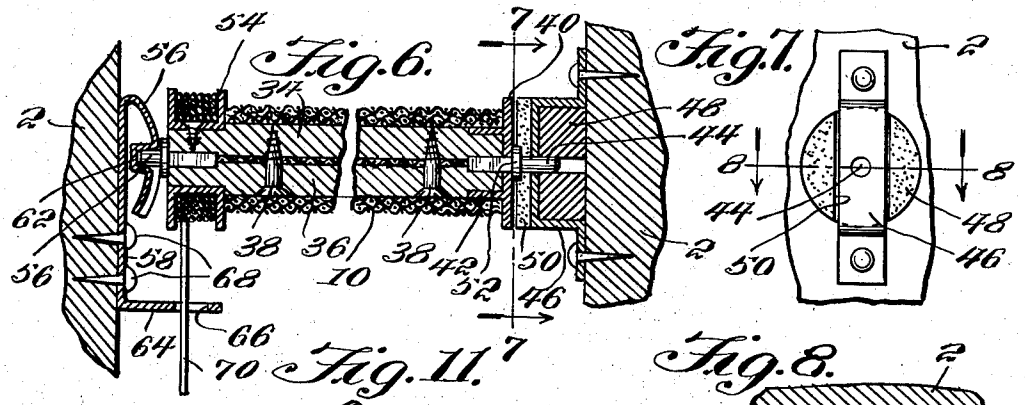
INVENTOR.
Nathan Hammer,
BY Victor J. Evans & Co.
ATTORNEYS

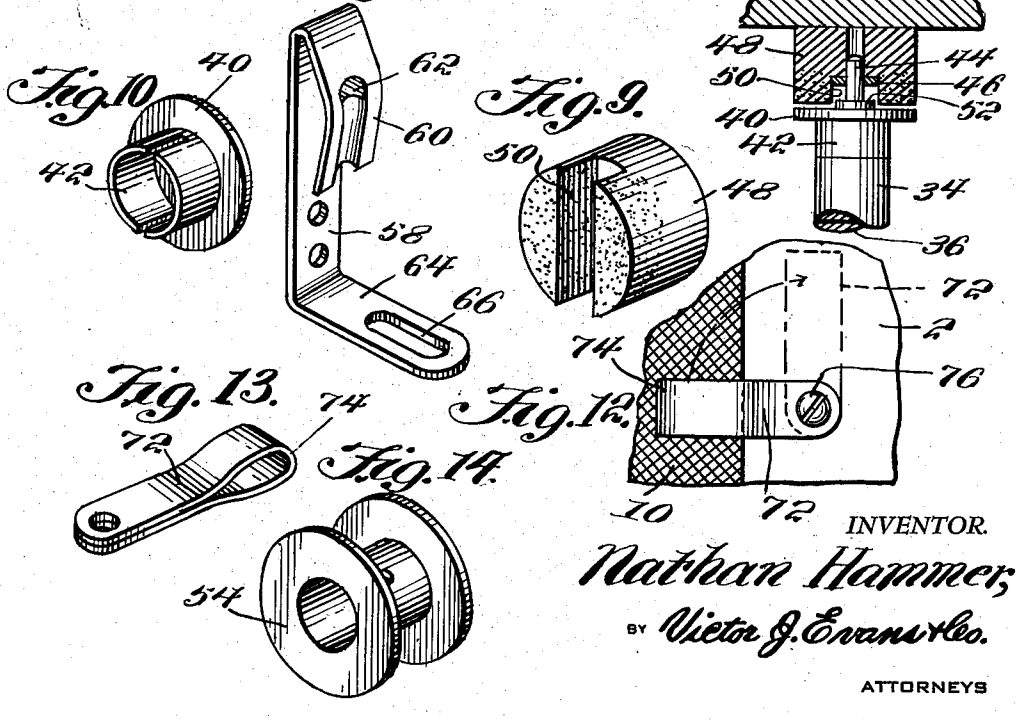
July 18, 1950 N. HAMMER 2,515,708

WINDOW SCREEN

Filed July 30, 1946 2 Sheets-Sheet 2







INVENTOR.

Nathan Hammer,

BY Victor J. Evans & Co.

ATTORNEYS

Patented July 18, 1950 2,515,708

UNITED STATES PATENT OFFICE

2,515,708

WINDOW SCREEN

Nathan Hammer, New York, N. Y.

Application July 30, 1946, Serial No. 687,083

4 Claims. (Cl. 160—298)

1

My present invention relates to an improved window screen and more particularly to the roller supports for the screen and the means employed for retaining the screen in adjusted position. The screen of my invention is adapted for mounting exterior of the window sashes and depends from rollers located near the upper extent of the sashes. The screen so mounted may be vertically raised and lowered and the novel means employed hereinafter referred to will secure the screen in any desired position.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention according to the best mode I have thus far devised but it will be understood that various changes and alterations may be made in the exemplified structure within the scope of the appended claims.

In the drawings:

Figure 1 is a front elevational view of the screen of my invention shown in lowered position and mounted on a conventional window frame.

Figure 2 is a vertical sectional view through the window frame.

Figure 3 is a plan view of the idler roller.

Figure 4 is a sectional view at line 4—4 of Figure 3.

Figure 5 is a sectional view at line 5—5 of Figure 3.

Figure 6 is a longitudinal sectional view of the screen roller.

Figure 7 is a sectional view at line 7—7 of Figure 6.

Figure 8 is a sectional view at line 8—8 of Figure 7.

Figure 9 is a perspective view of the magnet employed to hold the screen in adjusted position.

Figure 10 is a perspective view of the end collar for the screen roller.

Figure 11 is a perspective view of the resilient bracket.

Figure 12 is a detail view of the screen catch.

Figure 13 is a perspective view thereof.

Figure 14 is a perspective view of the reel.

Figure 15 is a partial view in perspective of the screen roller.

Figure 16 is a perspective view of a modified catch.

Referring now to the drawings in detail I have illustrated a conventional window frame 2 having a sill 4 and provided with an upper sash 6 and lower sash 8. The screen 10 is fashioned of conventional material as metal or plastic and the lower free end of the screen is provided with a stiffening rod 12.

2

In order to permit the close relation of the upper portion of the screen with the window frame to prevent entrance of bugs and flies, I employ the idler roller 14 having end pins 16, one pin being supported in fixed relation in the bracket 18 through the flange 20 and hole 22, the bracket being secured to the frame by screws 24.

The other end pin is detachably secured in the bracket 26 having a spring arm 28 and an opening 30, and screws 32 are provided to secure the bracket on the frame opposite the bracket 18. The roller carried on these brackets supports the screen thereon.

The screen roller comprises sections 34 and 38 with the end of the screen material therebetween and secured therein by screws 38. One end of the roller is reduced and receives thereon the collar 40 having a split ring 42, and a stub shaft 44 is carried thereby. The shaft extends into the bracket 46 secured to the frame and within the bracket I have located a magnet 48 substantally cylindrical in shape and formed with a diametrical slot 50 forming separated poles. A washer 52 separates the magnet from the collar 40 and it will be apparent that the magnetic pull of the magnet will attract the collar and releasably resist rotation of the roller. The roller of course may be rotated by manual pressure but the magnet will secure the roller in adjusted position.

On the opposite end of the roller sections I have fashioned the reel 54 and a stub shaft 56 is secured in the bracket 58 through the opening 62 in the resilient spring arm 60, the bracket being secured to the frame by screws 68. A guide arm 64 on the bracket is formed with a slot 66 therethrough guiding the cable 70 from the reel and through the eye 71 to the stiffening bar 12.

The screen is secured in close relation to the window frame by means of the catches 72 formed of preferably metal strips looped as at 74 and secured by screws 76. In Figure 16 I also provide these catches with a washer 78 in which case the screen overlaps the window frame.

From the above description of the construction and operation of the screen of my invention it will be apparent that the screen will be durable and yet will be easily and with facility raised and lowered. The novel arrangement for securing the roller and screen in adjusted position will not be subject to wear as are springs, and the screen will automatically be secured in position whenever the manual pressure stops.

With the use of the idler roller the screen will always be maintained in close proximity to the

window frame as it otherwise would not be if the screen roller were mounted directly above the vertical plane of the screen and the diameter of the screen rolled, would diminish or increase as the screen was adjusted.

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

1. The combination with a flexible window screen and its roller, a bracket mounting for the roller, and magnetic means in the bracket releasably securing the roller in adjusted position.

2. The combination with a window screen and its roller, of a supporting bracket for the roller mounted on the frame of the window, a magnet in the bracket having a diametrical slot forming spaced poles continually pulling the roller against the magnet whereby the roller is frictionally secured in adjusted position.

3. The combination with a window screen and its roller, of a metal cap for the roller, a supporting bracket for the roller mounted on the window frame, a magnet in the bracket having a diametrical slot forming spaced poles continually pulling on the roller cap and holding same

against itself whereby the roller is frictionally secured in adjusted position.

4. The combination with a window screen and its roller, of a bracket for the roller mounted in the window frame, magnetic means in the bracket frictionally holding the roller in adjusted position, an idler roller mounted on the frame vertically aligning the screen, and pivotally mounted means on the frame holding the edges of the screen in close proximity with the frame.

NATHAN HAMMER.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
141,313	Blatterlein	July 29, 1873
695,525	Wuest	Mar. 18, 1902
1,069,131	Harris	Aug. 5, 1913
1,246,570	Edwards	Nov. 13, 1917
1,536,005	Housteau	Apr. 28, 1925
2,341,440	Hammer	Feb. 8, 1944