E. H. SIMONTON.

ROLLER SCREEN.

APPLICATION FILED JUNE 21, 1917.

1,258,366.

Patented Mar. 5, 1918.

Fig. 1

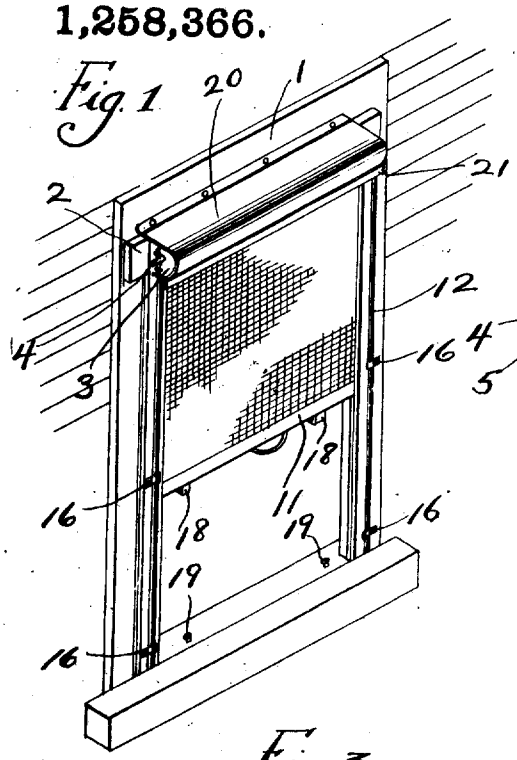


Fig. 2.

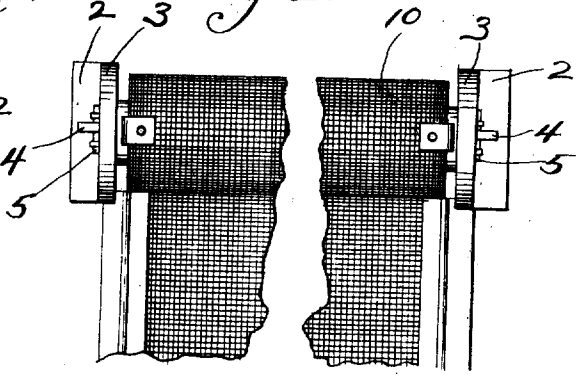


Fig. 4.

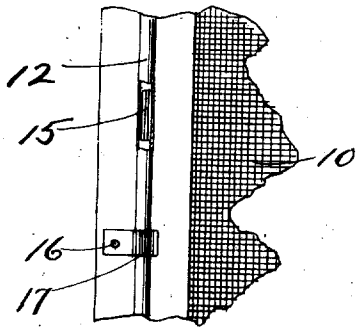


Fig. 3.

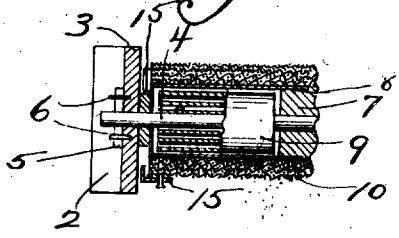


Fig 5.

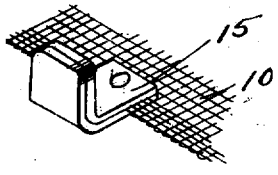
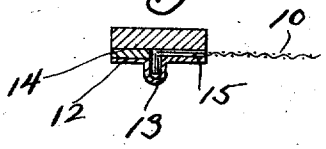


Fig. 6.



Witness

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UNITED STATES PATENT OFFICE.

EDMUND H. SIMONTON, OF GARY, SOUTH DAKOTA.

ROLLER-SCREEN.

1,258,366. Specification of Letters Patent. Patented Mar. 5, 1918.

Application filed June 21, 1917. Serial No. 176,141.

To all whom it may concern:

Be it known that I, EDMUND H. SIMONTON, a citizen of the United States, residing at Gary, in the county of Deuel, State of South Dakota, have invented certain new and useful Improvements in Roller-Screens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains, to make and use the same.

This invention relates to roller screens.

The object of the invention is to provide a practical roller screen to be mounted upon the outside of a window frame, so that the screening may be drawn across the window opening and fastened, while leaving the window sash free for manipulation at the will of the occupants of the house.

With the above general object in view, and such others relating to the details of construction of the various parts, as may hereinafter appear, my invention will now be fully set forth and described, reference being had to the accompanying drawings.

In the drawings:—

Figure 1 is a perspective view showing the screen mounted upon the outside of a window casing,

Fig. 2 is an enlarged view of the roller mechanism from which the cover has been removed,

Fig. 3 is a section on line 3—3 of Fig. 2,

Fig. 4 is a detail of one of the slide members,

Fig. 5 is a detail of the marginal construction of the screen, and

Fig. 6 is a section on line 6—6 of Fig. 4.

Referring more particularly to the drawings, 1 represents the window casing as viewed from the outside. Secured to the upper cross head of the casing 1, is a base plate 2 which extends entirely across the casing, and carries at its ends the bearing blocks 3. Mounted in the bearing blocks 3 are the stub shafts 4 which are keyed against rotation therein by means of the cross pins 5 which are removably passed through the outer ends of the stub shafts and are locked into position by means of the clips 6. Between the bearing heads 3 the stub shafts have mounted thereon a roller 7 which is provided at each end with metal housings 8 which are of the same diameter as the roller and house the coil springs 9. One end of each of the coil springs is connected to its respective housing, and the opposite end is fixed to the corresponding stub shaft, so that as the roller is rotated to withdraw the length of the screening 10, the springs are wound so as to increase their tendency to rewind the screening 10. The length of the screening 10 is secured at one end to the roller 7, and on its opposite end is provided with a transverse metal binding 11. The binding 11 operates in a pair of guide ways 12 which extend from top to bottom of the window casing at its sides. Said guide ways consist of sheet metal strips having the longitudinal outwardly bent channels 13, and having the foot bases 14 formed along their outer edges so as to permit the inner edges to stand away from the casing 1 when the foot bases are secured to the latter. The extremities of the binding 11 are upturned so as to ride in the channels 13, and the screen length 10 is furthermore provided at intervals with the cleats 15 which are also right angularly bent so that while the arm which is attached to the screening rides below the spaced portion of the guide, the other arm operates in the channel 13. In order to secure the guide strips to the casing, I provide the clips 16 which comprise base portions which bear upon the foot sections of the guide strips and are apertured to receive fastening screws, and the hooked portions 17 which overlie the channels 13, thereby reinforcing the latter and providing a stop to the accidental spreading of the spaced portion of the guide strips.

In order to secure the screen in its extended position, I provide the pivoted latch members 18 on the binding strips 11 and the headed bolts or screws 19 in the sill, with which the latches may be engaged.

The winding structure is housed by a sheet metal casing 20 which is secured across and conforms to the marginal edges of the bearing blocks 3, and a suitable wearing strip 21 is secured along the lower edges of the casing 20, said wearing strip being of flexible material or fabric which will keep closed the slot or opening through which the screening length passes.

The roller screen of the above described invention provides a simple and practical device, in that the nature of its manufacture and assemblage permits its use upon the outside of a window, rather than on the inside, thereby increasing the efficiency of the screen. Thus, it is only necessary to re-

move the roller screening at such comparatively infrequent periods that it may be necessary to wash the windows or otherwise gain access to the exterior sides of the sashes. At all other times the sashes may be raised or lowered without disturbing the screen. When cold weather renders the screens unnecessary, they may be released or rolled up within the casing 20, and remain thus disposed until the following warm season.

What I claim as my invention is:—

1. A roller screen, comprising in combination, a base plate, a pair of bearing blocks on the ends of the base plate, stub shafts mounted in said bearing blocks, a roller rotatable upon the stub shaft, a housing carried by each end of the roller and forming continuations thereof of equal diameter therewith, and springs abutting the ends of the roller and secured to the corresponding roller housing and to the stub shafts, within the housing, so that when the screen is unrolled, the springs are tightly wrapped, a length of screening secured to the rollers, and overlying the housing, and a casing mounted on the bearing blocks and secured to the base plate to completely shield the screen.

2. A roller screen, comprising in combination, a spring roller, a length of screening thereon, a binding on the lower end of the screen, clips along the longitudinal edges of the screen, the outer extremities of the binding and the clips being turned outwardly at right angles, and guide strips mounted to receive the edges of the screen, and having right angularly directed channels to receive right angularly turned ends of binding and clips.

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

EDMUND H. SIMONTON.

Witnesses:
J. F. Carlson,
E. L. Lohr.