G. NEUPAUER.

ROLLER SCREEN.

APPLICATION FILED APR. 8, 1915.

1,164,385.

Patented Dec. 14, 1915.

2 SHEETS—SHEET 1.

Fig. 1.

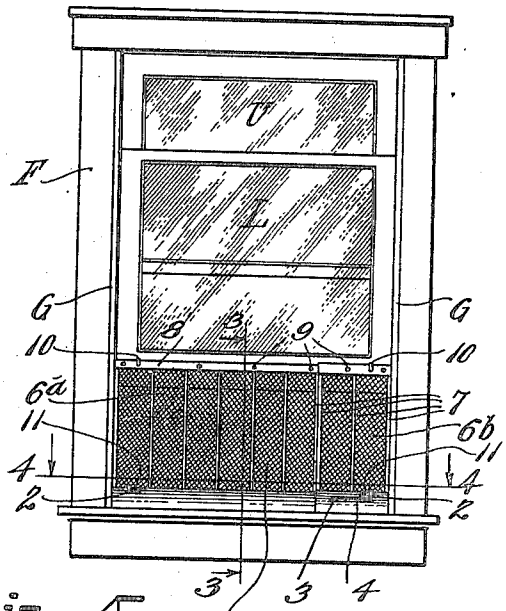


Fig. 4.

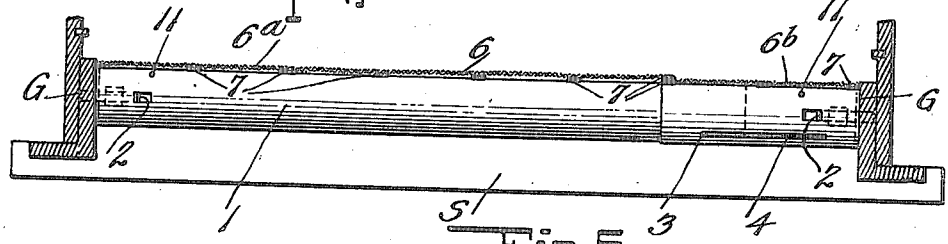
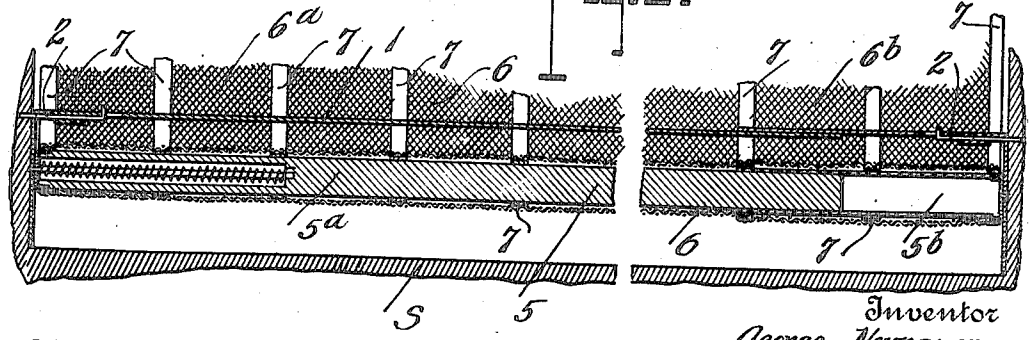


Fig. 5.



Witnesses

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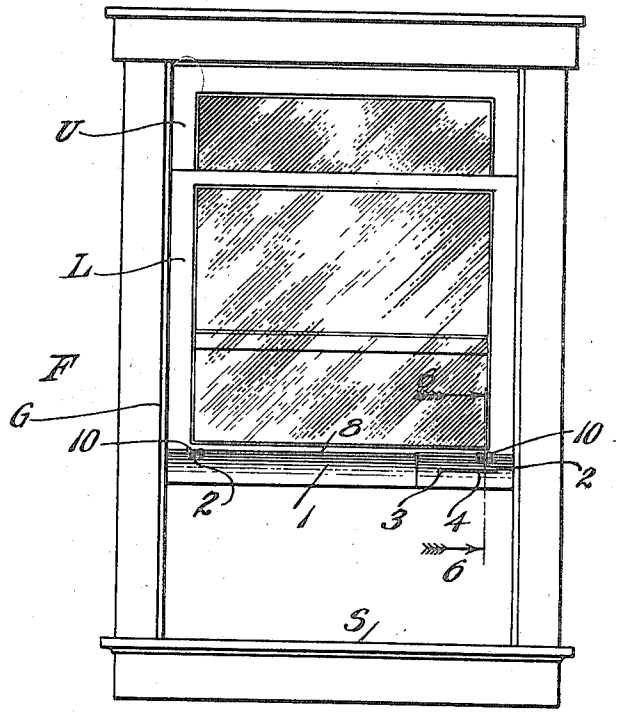
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2 SHEETS—SHEET 2.

Fig. 2.



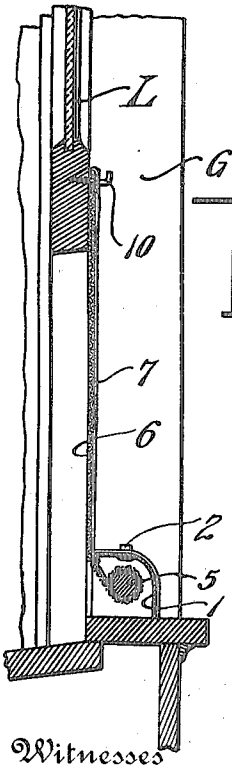


Fig. 3.

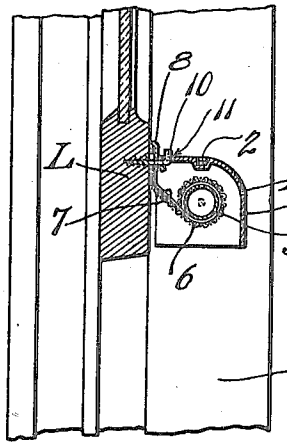


Fig. 6.

Witnesses

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UNITED STATES PATENT OFFICE.

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ROLLER-SCREEN.

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Application filed April 8, 1915. Serial No. 20,013.

To all whom it may concern:

Be it known that I, GEORGE NEUPAUER, a citizen of Austria-Hungary, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Roller-Screens; and I do 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.

My invention relates broadly to improvements in window screens, and more particularly to those of the type unwound from a roller as the window is opened and wound thereon when the same is closed.

The object of the invention is to provide a device of this class which may be easily and inexpensively manufactured and marketed and which will possess a number of unique and highly advantageous features.

With this general object in view, the invention resides in certain novel features of construction and combination of parts hereinafter described and particularly pointed out in the claims.

In describing the invention, I shall refer to the accompanying drawings wherein like reference characters designate corresponding parts throughout the several views and wherein:

Figure 1 is an inner side view of a window showing the application of the invention thereto, the lower sash of the window being raised; Fig. 2 is a similar view with the sash raised and illustrating the manner in which the reel or roller may be suspended thereby; Fig. 3 is a vertical transverse section as seen along the plane indicated by the line 3—3 of Fig. 1; Fig. 4 is a horizontal section taken on the line 4—4 thereof; Fig. 5 is a longitudinal section of the roller and the casing in which the same is disposed. Fig. 6 is a detail vertical transverse section taken on the line 6—6 of Fig. 2.

In these drawings, constituting a part of the application, F designates a window frame in which the usual upper and lower sashes U and L are slidably mounted, said frame including a sill S as is common with a device of this class. Interposed between the upright sides of the frame F and contacting at its ends with the upright guide strips G thereof, is a casing 1 which rests upon the sill S and which is retained in this position by a pair of latches 2 which project beyond the ends of said casing into openings formed in the upright sides of the frame F. Although the casing 1 could be of practically any preferred construction, it is preferably formed of two sections telescopically engaged, whereby to render such casing adjustable to window frames of different widths, the outward movement of the aforesaid sections being limited by a stop 3 carried by one thereof and traveling within a slot 4 formed in the other. Furthermore, the latches 2 are here shown in the form of sliding bolts although it will be evident that they might perform their functions to equal advantage, were they pivotally mounted. It is to be observed, that these latches are the sole means of retaining the casing 1 in normal position, this being highly advantageous for a purpose to become obvious as the description proceeds.

Disposed within the casing 1, is a spring wound roller 5 similar to an ordinary shade roller, but preferably formed of a solid section 5^a and a tubular section 5^b receiving the aforesaid section, since by this means, the length of the roller may be varied in case the length of the casing 1 must be increased or diminished.

Secured to the roller 5 by any preferred means, is the screen 6, constructed of two overlapping sections 6^a and 6^b secured respectively to the sections 5^a and 5^b of said roller, it being thus evident that said screen may be adjusted in width. In order to effectively reinforce the screen 6, it is provided at suitably spaced intervals with vertically extending strips 7 of tape or the like, the upper ends of these strips as well as the upper end of the screen, being secured by any preferred means to the lower edge of a horizontal longitudinally extensible and contractible attaching strip 8, this strip being secured by screws 9 or other appropriate fasteners to the lower end of the lower sash L. It will thus be evident that raising of this lower sash will unwind the screen 6 from the roller 5, thus preventing the entrance of flies and insects, while the lowering of the sash will allow the screen to be rewound on said roller. This operation can take place, however, only as long as the casing 1 is anchored at the lower end of the frame by the latches 2, it being evident that releasing of said latches will allow

the casing 1 to be raised adjacent the lower end of the sash L. In this position, the casing 1 may be retained by hooks 10 projecting outwardly beyond the attaching strip 8 and received by keepers 11 with which the aforesaid casing is provided. By these simple details of construction, it will be evident that the casing 1 and parts carried thereby may be raised with the lower sash when it is undesirable to have the screen 6 disposed to operative position, this being a salient feature of the invention.

From the foregoing description, taken in connection with the accompanying drawings, it will be evident that although very simple and inexpensive construction has been provided for carrying out the object of the invention, the device will be very efficient in operation and will possess a number of highly advantageous features.

In the drawings, I have shown certain specific details of construction for accomplishing probably the best results, and in the foregoing have described such details, but it will be evident that I need not be limited thereto, otherwise than to the extent to which the appended claims limit me.

I claim:—

1. In combination, a reel for releasable attachment to the lower end of a window frame, a screen wound on said reel and rising therefrom, the upper end of said screen being adapted for attachment to a window sash, and supporting members to be carried by said sash for the support of the reel when the same is released.

2. The combination with a window frame and a window sash movable vertically therein, of a vertically movable reel releasably secured to the lower end of the frame, a screen wound on said reel rising therefrom and secured to the sash, and supporting members projecting laterally from said sash for the support of the reel when the same is released.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE NEUPAUER.

Witnesses:
WILLIAM NEUPAUEMMR,
LEO M. BRIMMER.