

No. 649,625.

Patented May 15, 1900.

J. C. BOWE.
ADJUSTABLE WINDOW SCREEN.

(Application filed Dec. 18, 1899.)

(No Model.)

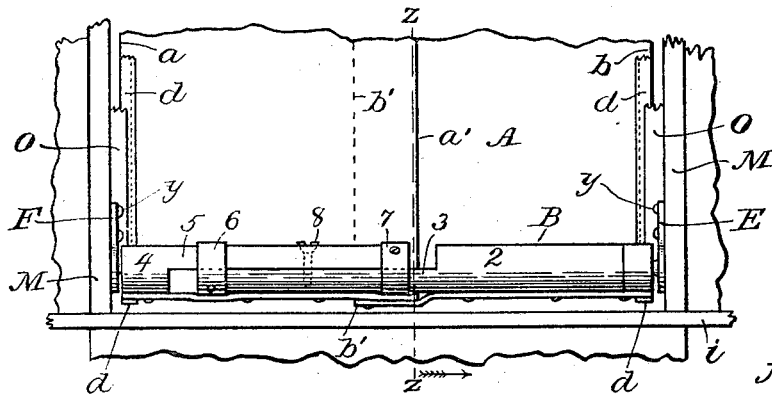


Fig. 1.

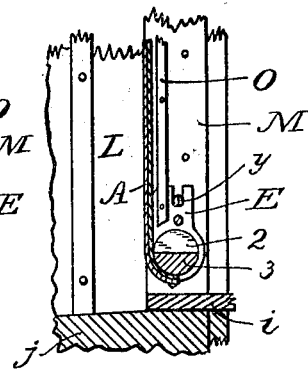


Fig. 2.

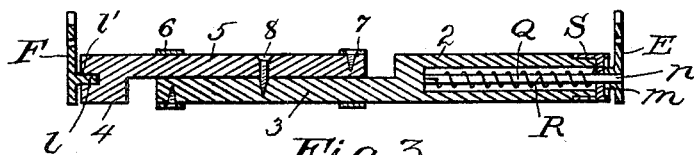


Fig. 3.

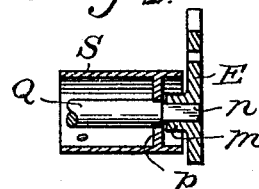


Fig. 4.

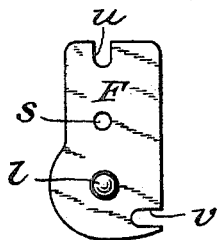


Fig. 5.

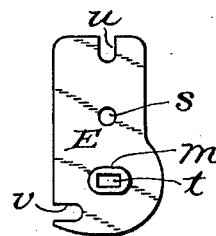


Fig. 6.

WITNESSES:

T. Cromwell.

Sara Alexander

INVENTOR:

James C. Bowe.

BY

E. J. Silvius.

ATTORNEY.

UNITED STATES PATENT OFFICE.

JAMES C. BOWE, OF INDIANAPOLIS, INDIANA.

ADJUSTABLE WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 649,625, dated May 15, 1900.

Application filed December 18, 1899. Serial No. 740,713. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. BOWE, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Adjustable Window-Screens and Attachments; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to rolling window-screens, and has reference more particularly to the brackets whereby the roller carrying the screen may be supported, the object being to provide brackets which may be applied without defacing the casings of the window and which may be removed and replaced without the aid of tools.

The invention consists in novel brackets having slots in the edges thereof arranged in a manner whereby the above object is attained; and it consists, further, in the parts and combination of parts particularly described and claimed.

Referring to the drawings, Figure 1 represents a fragmentary front elevation showing a screen-roller in operative position in the brackets constructed in accordance with my invention and having a portion of an unrolled screen attached thereto; Fig. 2, a transverse fragmentary view on a line ZZ of Fig. 1; Fig. 3, a longitudinal central sectional view of an extensible screen-roller to which my improved brackets are connected, and Figs. 4, 5, and 6 enlarged detail views.

In the drawings similar letters and numerals of reference in the several views designate similar parts.

In practically carrying out my invention I apply removable brackets to the opposing faces of the inner slide-strips M M, which are attached to the frames L of the windows, so that the screen-roller may be mounted close to the adjacent sash and the free end of the screen may be suitably connected to the sash. The roller is situate closely above the sill-facing *i*. As it is designed that the screens

and all attachments thereof are to be applied without requiring the cutting and fitting of any parts other than the inserting of small screws or nails, the brackets are provided with projections that enter the ends of the rollers, and the rollers are extensible, and so are the screens, in the direction of their width across the window-opening.

The windows and frames shown will be understood as merely illustrating the adaptation of my invention thereto, the side parts L L designating the frame having a sill *j* and sill-facing *i*, the usual slide-strips being suitably attached to the frame.

The brackets E and F for supporting the lower screen A and its roller B are composed each of a very thin plate of metal of identical contour, but having their projections arranged at opposite sides of the plates, so as to adapt one for the right and the other for the left hand side. Each has at its top edge a slot *u* and at a side edge near the opposite end a slot *v*, in which the retaining-screws may be set, without their heads, however, bearing hard against the face of the bracket-plate, so that the latter may slide away from the screws without having to loosen the latter. The bracket E has a projection *m*, in which is a rectangular socket *t* to receive the flattened end *n* of the roller-axle Q common to spring-rollers, the projection *m* extending into the end of the roller, which in the present case has a sleeve S attached to it and having a head *p* set somewhat within its outer end, and a shoulder on the axle Q bears against the inside of this head. One end of a spring R, coiled about the axle, is attached to the head, and its opposite end is attached to the inner end of the axle, the axle and spring being loose in a circular recess in the end of the roller. The opposite end of the roller has a circular socket *l'* to receive the projection *l*, which is a stud-axle attached to the bracket F. Each bracket is also preferably provided with a screw or nail hole *s*, which may in some cases be desirable. The brackets may be inverted and used at the top of the window for an upper screen.

The rollers for the bottom and top screens are alike, preferably of wood material mainly, each being substantially cylindrical, but having side gaps or recesses, which are covered

by the screens and are not objectionable, and consist of a part 2, in which at one end are the axle and spring above described and a companion part 4, having the socket 7' in its cylindrical end. Each part is halved, so that the part 2 has a transversely-semicircular part 3 and the part 4 has a like semicircular portion 5. The plane sides are placed together, an encircling band 6 being attached to the portion 3 and a like band 7 attached to the portion 5, and when the parts have been adjusted a screw 8 or tack is driven in to prevent movement of the two parts relatively longitudinally.

The screen A in order to be employed to the greatest advantage with my improved brackets and an extensible roller may comprise two rectangular sections of suitable flexible material, each section having one edge overlapping one edge of the companion section, as in Fig. 1, in which the side edge *a* is placed at one end of the roller B and the opposite side edge *a'* extends beyond the longitudinal center of the roller, the companion section having a side edge *b'* overlapping the edge *a'* and having its opposite side edge *b* situate at the opposite end of the roller. The roller may first be adjusted to a proper length to fit the space between the brackets and then the screen-sections adjusted to conform thereto and secured to the roller by small tacks. A further advantage may be gained by applying a strip of fabric *d* at the edges *a* and *b*, so as to provide a thickness thereat equal to the combined thickness of the doubled or overlapping portions.

In order to close the apertures at the edges of the screens, I apply a strip O to each strip M, close to the front of the screen, so that the edge of the latter runs between the strip O and the sash-slideway.

While I show the screen as applied to a sash sliding vertically, it is obvious that my invention is applicable to a sash arranged to slide horizontally, and also that a cord may be connected to the screen to draw the same across a window-opening where the sash may be hung on hinges.

In operation, the attachments having been connected and the screens and rollers mounted, as described in detail, the lower screen is connected to the bottom rail of the lower sash and the upper screen is connected to the top rail of the upper sash in a suitable manner, a screw-driver or a hammer being the only tool

required in this work. When the lower sash is raised, the lower screen unrolls and follows the sash and covers the opening. When necessary to reach outside blinds, the screen may be quickly detached from the sash and as readily connected again, and for the purpose of cleaning the screen may be quickly removed entirely with its roller by simply drawing the roller outward from the sash, the tension of the spring in the roller acting in a direction to prevent accidental dislodgment of the roller-brackets, as they normally tend to draw the roller and brackets toward the sash and to the securing-screws *y* also upwardly. The act of drawing the upper sash down draws the upper screen down over the opening left by the sash. Reverse movements of the sashes permits the springs R, which are wound under tension, to again wrap the screens about their rollers.

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

1. In a rolling screen, the combination of the window-strips, the sash, a pair of screws projecting from the strips and so situate that the lower screw of each pair shall be closer to the sashway than the other one of the pair, the brackets each having the slot in the top edge of the body thereof engaging the upper one of a pair of said screws and having also the slot in the edge of the body thereof disposed toward the sash and situate at the lower end of said edge and engaging said lower one of said pair of said screws, the roller mounted in said brackets, and the screen mounted on said roller, substantially as shown and described.

2. In a rolling screen, the combination of the window-strips, the sash, the screws projecting from the strips and situate in pairs in alinement longitudinally at opposite strips, the brackets having each the slot at the edge thereof and the slot at the lower end of the edge thereof disposed toward the sash and having also the projecting axles, the roller mounted on said axles, and the screen mounted on said roller, substantially as shown and described.

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

JAMES C. BOWE.

Witnesses:

WM. H. PAYNE,
E. T. SILVIUS.