(No Model.) 2 Sheets—Sheet 1.

N. J. BISHOPRICK.

WINDOW SCREEN.

No. 300,562. Patented June 17, 1884.

Fig. 1.

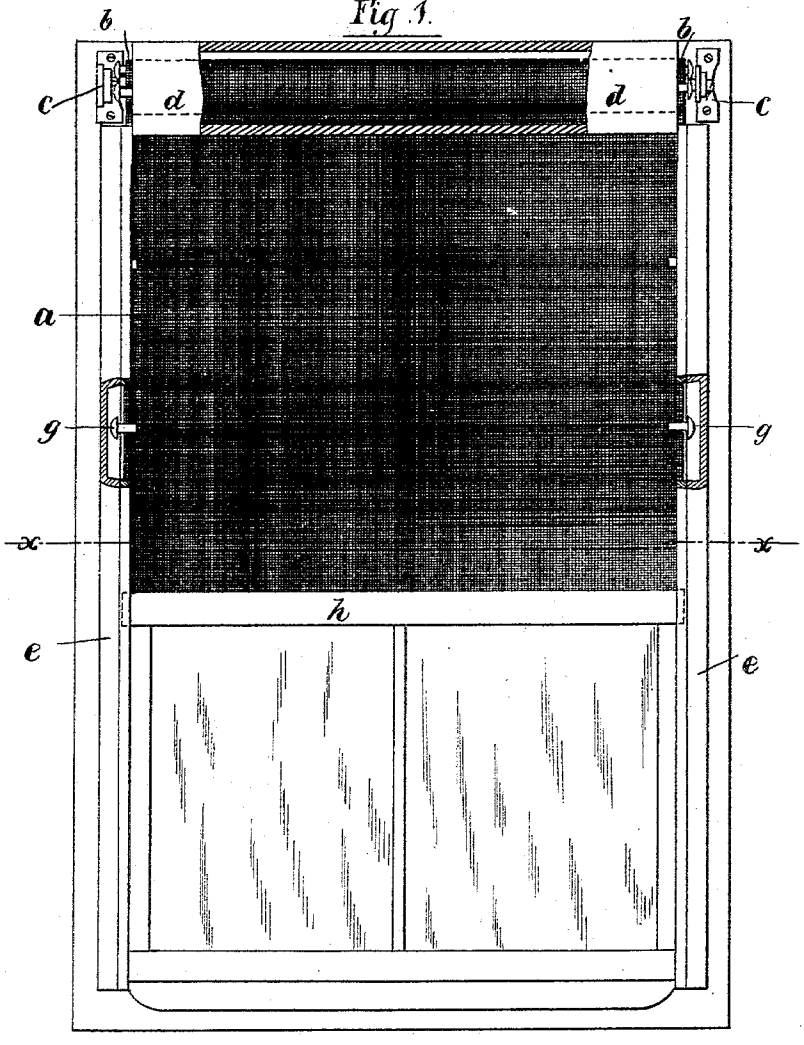
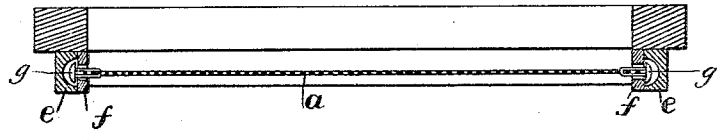


Fig. 2.



Witnesses:
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Arthur C. Webb

Inventor:
Nicholas J. Bishoprick
By Ernest C. Webb
his Atty

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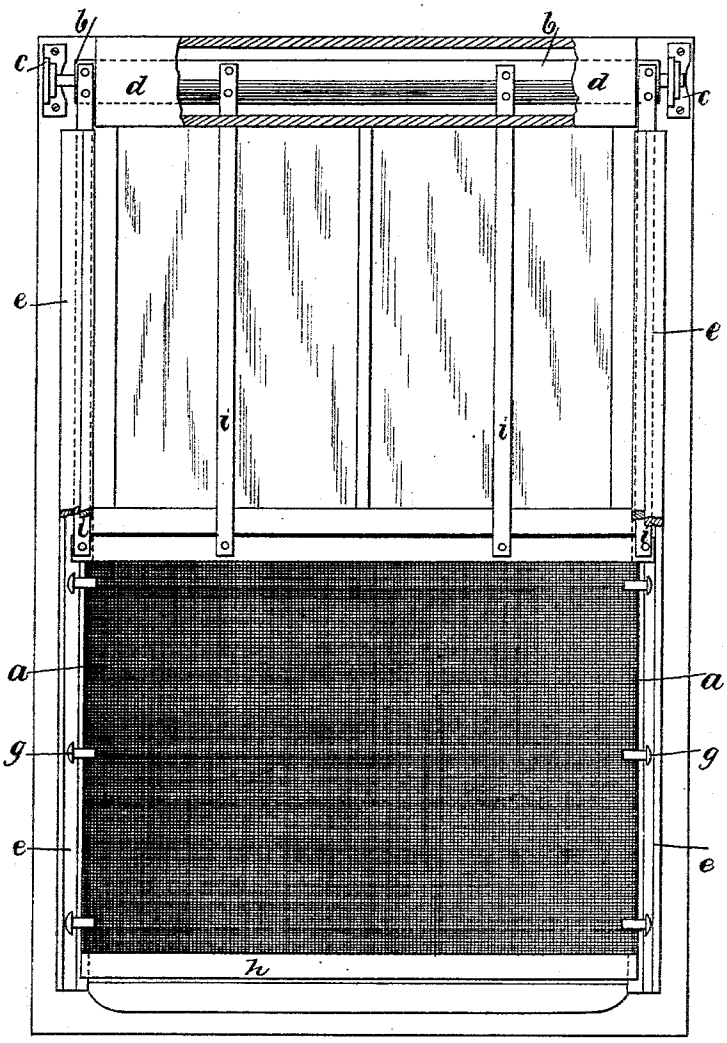
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Fig. 3.



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UNITED STATES PATENT OFFICE.

NICHOLAS J. BISHOPRICK, OF BROOKLYN, NEW YORK.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 300,562, dated June 17, 1884.

Application filed March 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS J. BISHOPRICK, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Window-Screens, of which the following is a full, clear, and exact description.

This invention is in the nature of an improvement in that class of window-screens arranged to be placed in position for use, and to be removed when not desired for use, by means of a roller, after the manner of a window-curtain.

The improvement consists of a window-screen the fabric of which is provided with headed buttons secured to its longitudinal edges, and which fabric is attached to a roller secured in any ordinary manner to the window-casing, combined with vertical guides attached to the sides of the window-casing, and composed of longitudinally-grooved strips having longitudinally-slotted face-pieces, in which guides, so constructed, the headed buttons and the longitudinal edges of the fabric enter, and are secured in such manner as to permit the movement of the fabric up and down over the window, the fabric being stiffened transversely, all substantially as hereinafter specified and claimed.

In the accompanying drawings illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a front elevation of a window provided with my screen, the box for the roller and the vertical guides being partly broken away. Fig. 2 is a cross-section on the line *x x*, Fig. 1. Fig. 3 is a view in front elevation of a modification.

a designates a piece of fabric suitable for window-screens—such, for instance, as wire netting—and I prefer a fabric the longitudinal edges of which are selvage. One end of this fabric is secured in any ordinary manner to any suitable rolling device—such, for example, as a Hartshorn spring curtain-roller—*b*, which may be secured to the window-casing by the usual brackets, *c c*. This roller is incased in a box, *d*, attached with a close joint at its upper edge to the window-casing, and slotted or open at its lower edge for the passage through it of the screen *a*. This box so incloses the roller and fits to the casing as to prevent ingress of insects above the roller. *e e* are grooved strips attached vertically to the sides of the window-casing, and these strips have longitudinally-slotted face-pieces *f*. The screen fabric is provided at intervals along its longitudinal edges with headed metallic buttons *g*, the heads of which buttons fit loosely in the grooves of these strips *e*, and their shanks, together with the longitudinal edges of the fabric *a*, fit in the slots in the face-plates *f*, so as to permit the movement up and down of the fabric *a* after the manner of a curtain, the parts *e* and *f* serving thus as guides for said fabric, to keep it in place, to prevent its being swayed by drafts, and to retain it in its extended position across the window. The entry of longitudinal edges in the slots of the face-plates *f* serves to make practically tight joints at those points. The lower edge of the screen fabric is provided with a transverse stiffening-piece, *h*, which keeps it extended. This piece *h* is also preferably weighted to act as a tension device for the fabric, and it further serves to make a close joint with the window-sash. It is obvious that with this arrangement of the fabric the screen can be arranged to cover an opening in the window made by the movement of either the upper or lower sash.

In Fig. 3 I have shown the fabric of a length sufficient to cover one sash only, for economy of material, and have secured the fabric to the roller by means of a number of tapes or ribbons, *i*, the construction and operation being otherwise the same as that just above described.

In rolling up or unrolling the screen fabric the headed buttons pass the ends of the roller, their shanks lying flat upon the periphery of the roller; hence such buttons offer no impediment to the action of the roller, and do not require any special construction of roller or peculiar arrangement of screen fabric with relation to the roller.

By this construction of window-screen I obviate the necessity of altering the sash or casing of the window. The guides I employ being independently attachable, the screen can be applied very readily to any kind of window-

casing, and is adapted to be raised and lowered without reference to the sash.

I am aware that it is old to apply to the faces of window-frames sheet-metal guides the slots in which are arranged at the front, and which slotted guides receive the heads of right-angled buttons attached to the edges of ordinary curtains; but, as is obvious, the edges of the curtains do not and cannot enter the guides; hence openings are left between the curtains and guides, through which insects may readily enter into the apartment, thus rendering such construction utterly impracticable for application to a screen.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The herein-described window-screen, composed of the reticulated fabric *a*, the headed buttons *g*, secured to its longitudinal edges, a roller to which said fabric is connected, the grooved strips *e*, arranged longitudinally of the window, and provided with the face-pieces *f*, slotted lengthwise and receiving the buttons and edges of the fabric, and the transverse stiffening-bar *h*, engaging the slotted face-pieces, all and severally as and for the purpose specified.

2. The combination and arrangement, substantially as shown and described, of the reticulated fabric *a*, the headed buttons *g*, secured to its longitudinal edges, a roller, and tapes or ribbons *i*, by which said fabric is connected to the roller, the grooved strips *e*, to receive the headed buttons, and the longitudinally-slotted face-pieces *f* of said strips, in which the edges of the fabric are arranged to form insect-tight joints, and a transverse stiffening-piece, *h*, also engaging said slotted face-pieces, to hold the fabric extended and guide it in its movements.

In testimony whereof I have hereunto set my hand this 21st day of February, A. D. 1883.

NICHOLAS J. BISHOPRICK.

Witnesses:

ERNEST C. WEBB,

ARTHUR C. WEBB.