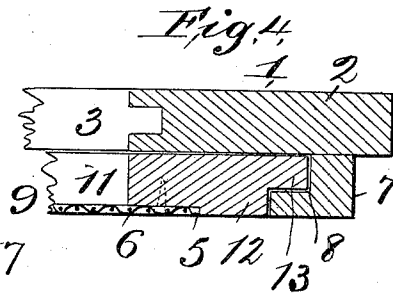
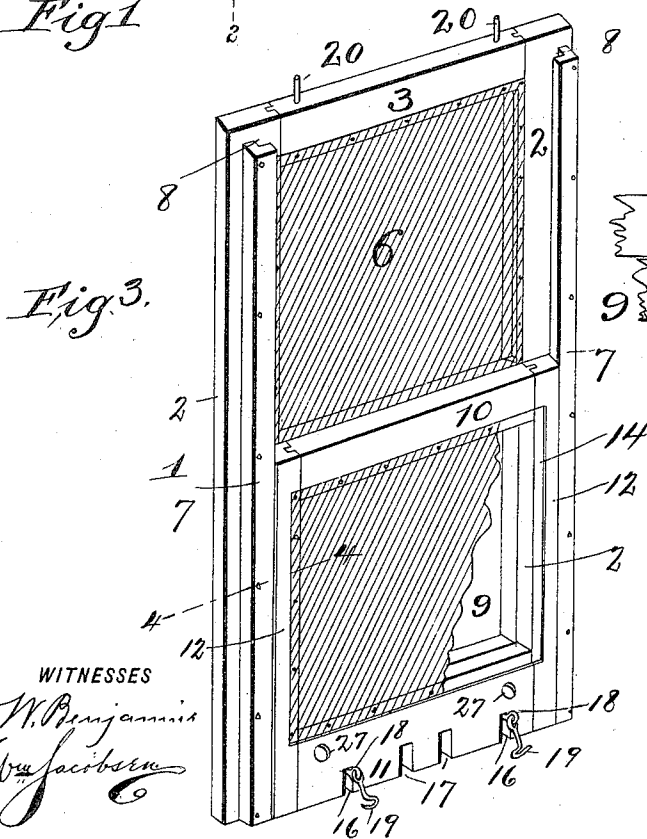
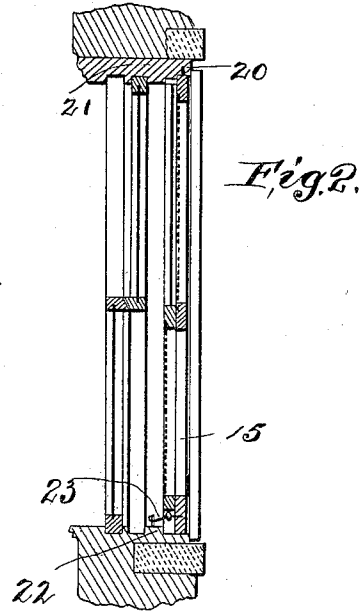
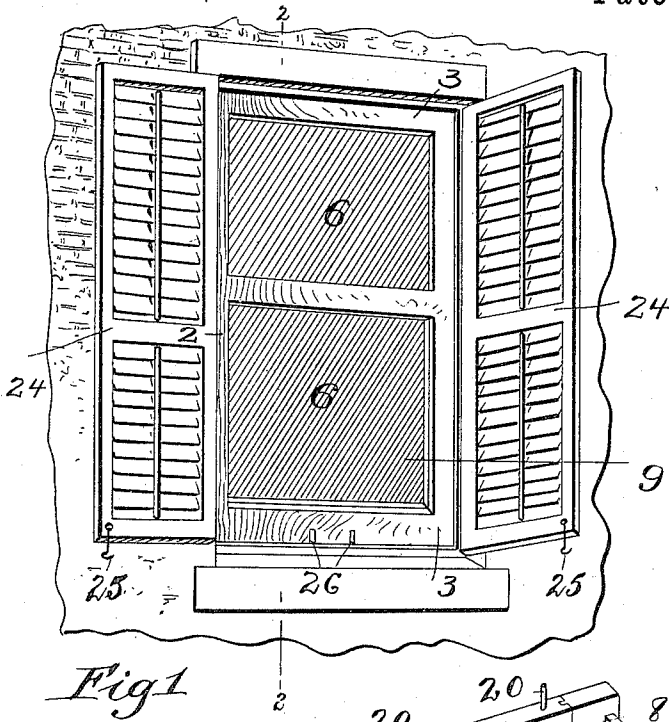


(No Model.)

B. DE LUCE.
WINDOW SCREEN.

No. 584,557.

Patented June 15, 1897.



WITNESSES

C. H. Benjamin
W. Jacobsen

INVENTOR

Bessie de Luce.

BY

Joseph P. Levy

ATTORNEY

UNITED STATES PATENT OFFICE.

BESSIE DE LUCE, OF MONTCLAIR, NEW JERSEY.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 584,557, dated June 15, 1897.

Application filed August 20, 1896. Serial No. 603,307. (No model.)

To all whom it may concern:

Be it known that I, BESSIE DE LUCE, a citizen of the United States, residing at Montclair, county of Essex, and State of New Jersey, have made certain new and useful Improvements in Window-Screens, of which the following is a specification.

The object of my invention is to improve the construction of window-screens and to provide a construction wherein the handling of outside or exterior blinds can be had without requiring any change in the usual construction of the window-casing.

My invention therefore consists in the construction and combination of parts hereinafter described, and further pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is an exterior view of a portion of a house, showing a window-casing, attached exterior blinds, and my improved screen secured in place. Fig. 2 is a sectional elevation on the line 2 2, Fig. 1. Fig. 3 is an enlarged perspective elevation of the screen complete; and Fig. 4 is a transverse sectional view on the line 4 4, Fig. 3, showing a portion of the main frame and sliding frame.

Similar numerals of reference indicate corresponding parts throughout the several views.

In the drawings forming part of this specification, the numeral 1 indicates the main frame of my improved screen, which comprises uprights 2, top and bottom cross-bars 3, and a central cross-bar, preferably constructed of wood and joined together in a light and substantial manner. The inside of the upper portion when in use of the main frame between the central cross-bar and the top cross-bar 3 is provided with a slight recess 5, formed in the side bars 2, top cross-bar 3, and the central bar, to which is secured a wire or other desired netting 6 in any suitable manner.

Instead of making the entire frame a fixture of the window-casing it is my design to make it readily attachable or detachable to or from the window-casing; and to provide means whereby access to the exterior of the window-casing can be had without removing the entire screen or its frame I provide a supplemental frame which can be moved up and down upon the inner vertical space of the main frame, as follows: Upon each of the side

uprights 2 is secured a rib 7 as closely adjacent the edge of the uprights as desirable, but preferably not completely to the edge, for the reason hereinafter described. In the inner side of each of these ribs is formed a groove 8. (Plainly seen in Figs. 3 and 4.) Within the ribs 7 and confined in its motions by said ribs and grooves is a movable frame 9. This frame 9 comprises the top cross-bar 10, bottom cross-bar 11, and side uprights 12, the side uprights being provided with vertical tongues 13 to engage the grooves 8 on the ribs 7. The side uprights 12, as well as the cross-bar, are provided with the recess 14, within which are secured the edges of a wire-netting 6 or the like in any suitable manner.

It will be noticed that the lower part or section of the main frame is not provided with a netting, as seen at 15, Fig. 2, and that the cross-bar 10 of the movable frame lies closely adjacent the screen 6 of the main frame, making a tight closure between the parts.

The lower cross-bar 11 of the movable section 9 is provided with a series of slots 16 17, and to the lower cross-bar 3 of the main frame are secured eye-screws 18, which project through a slot 16 when the section 9 is dropped down thereon, which eye-screws form a stop for arresting the downward movement of the movable section, and to the end of the eye-screws are affixed the hooks 19, which form means for securing the lower portion of the main frame to the window-casing.

As thus constructed the screen comprises two essential parts—first, the main frame, which is to remain stationary, so far as the movement of its parts are concerned, while in use, and having an upper screened section and a lower portion unscreened to provide access therethrough to the exterior of the window-casing, and a supplemental section movable up and down on the main frame and carried thereby, so that when such movable section is in its lowermost position it will place its screen over the unscreened portion of the main frame and when raised will lie over the screened portion of the main frame and allow access to the exterior of the window-casing through the unscreened section of the main frame.

Another portion of my invention consists in detachably securing the frame in the window-casing, and to this end I have provided

the top cross-bar 3 of the main frame with upwardly-extending dowel-pins 20, which enter dowels in the window-casing, as at 21, Fig. 2, and to the lower horizontal portion of the window-casing, as at 22, Fig. 2, I secure eye-screws 23, to which the hooks 19 can be secured. Thus when the entire screen, as shown in Fig. 3, is placed within the casing the movable section will be on the interior, and the dowel-pins can then be inserted into the dowels in the top of the window-casing, and the lower portion of the screen drawn inwardly and secured in place by the hooks 19 and eye-screws 23, the side uprights 2 of the main frame bearing against the side of the window-casing and the ribs abutting against the inside of the casing and preventing lateral displacement.

At 24 are shown conventional swinging shutters or blinds hinged or otherwise secured to the exterior of the window-casings. These shutters usually carry securing-hooks 25, of this or other suitable form. These hooks may be passed through slots 26, formed in the lower cross-bar 3 of the main frame, to secure the shutters in place. For this purpose the movable section 9 of the screen is moved upwardly, finger-holes 27 or other means being provided for this purpose, by which access to the exterior blinds 24 can be had. The blinds are then swung inwardly, the securing-hooks 25 passing through the slots 26 and secured to pins which are usually provided at the bottom of the window-casing for this purpose. The movable section 9 can then be lowered, the slots 17 passing downward over the hooks 25, allowing both parts to remain in their positions of rest without interference.

From the foregoing it will be apparent that I have provided a window-screen having fixed and movable portions, allowing free access to the exterior, the construction of which permits of the use of the exterior blinds and their operation, and also I have provided means for detachably securing the screen within the ordinary window without necessitating the affixture of any part thereto.

It is apparent that changes and modifications can be made in my invention without departing from the spirit thereof.

Having described my invention, I claim—

1. The combination with the detachable main frame, comprising the upright and parallel side bars 2, the top and bottom parallel cross-bars 3, and a central cross-bar 4, all lying in the same plane, the upright ribs on the face of the side bars 2 and each having an opposing longitudinal groove 8, a screen secured to the main frame or the parts 2, 3, 4, on the same side as the ribs 7, a movable frame comprising the side bars 12 and top and bottom cross-bars 10, 11, the bars 12 having tongues 13 engaging the grooves 8 in the ribs 7, and a screen secured on the movable frame, the lower section of the main frame being unscreened, substantially as described.

2. The combination with the detachable main frame, of the upper screened section secured to and within the plane of said frame, the lower unscreened section, the grooved ribs having tongues engaging the grooves in said ribs, a screen secured to said movable section, the eye-screws extending from the lower cross-bar of the main frame, and slots in the movable section for permitting said movable section to pass over and impinge on said screws, substantially as described.

3. The combination with the main frame having the upper fixed screen-section, the lower unscreened section, an additional screen-section movable up and down on the main frame, and alining apertures in the lower cross-bars of the main frame and additional section, substantially as described.

Signed at the city of New York, county of New York, and State of New York, this 19th day of August, 1896.

BESSIE DE LUCE.

Witnesses:

B. S. WISE,
JOSEPH L. LEVY.