

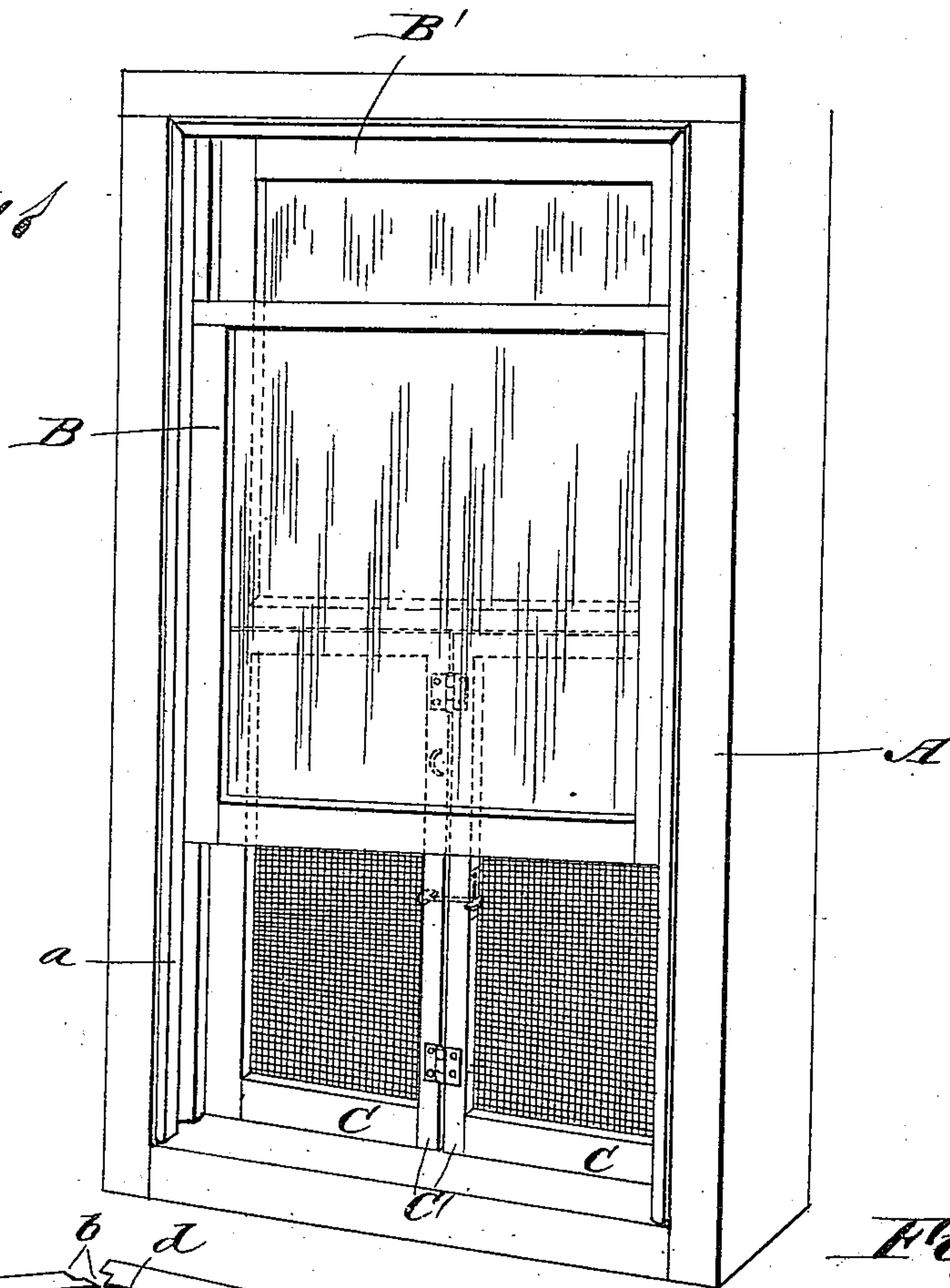
(No Model.)

T. ROBINSON.  
WINDOW SCREEN.

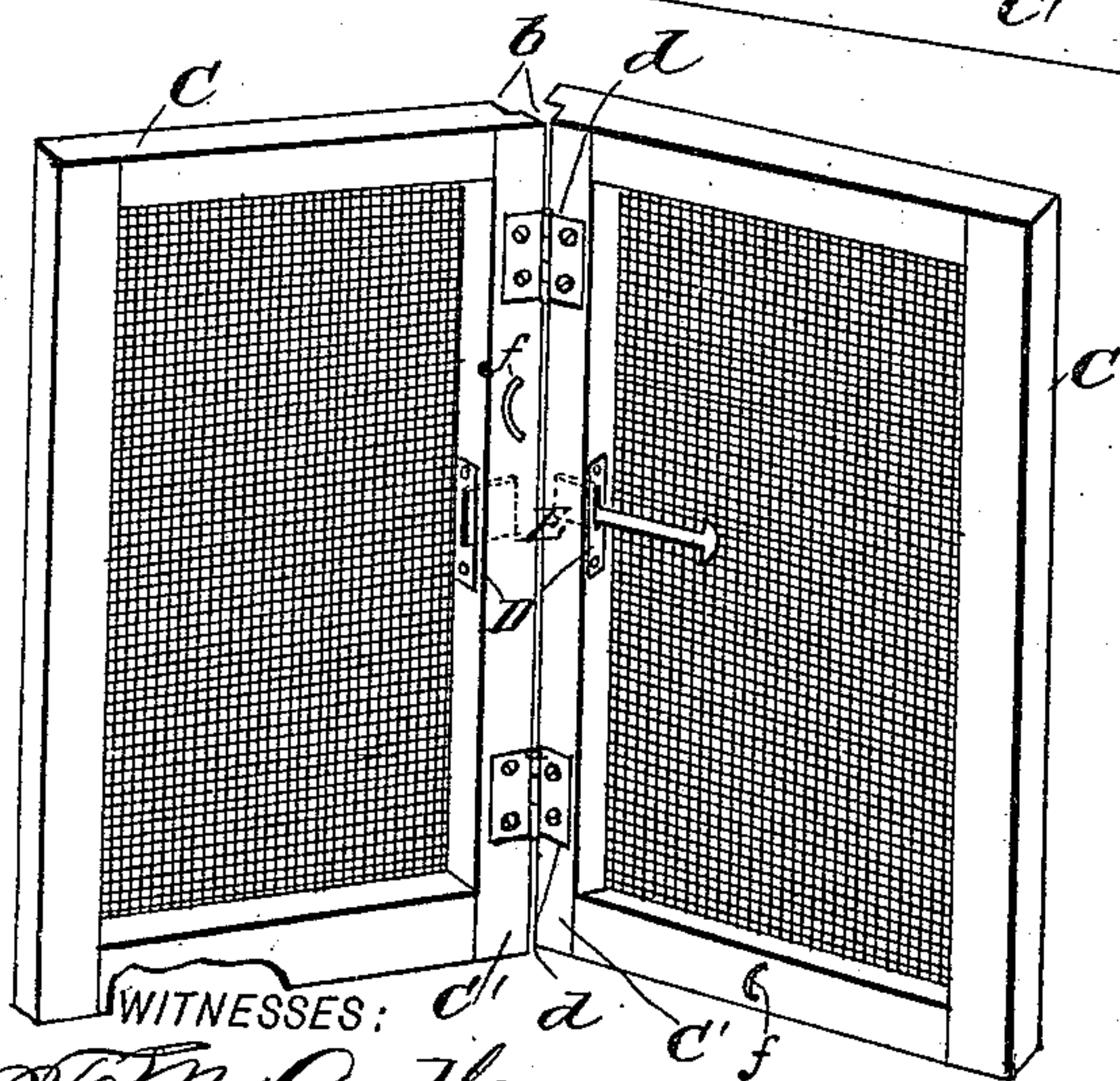
No. 442,783.

Patented Dec. 16. 1890.

*Fig. 1*



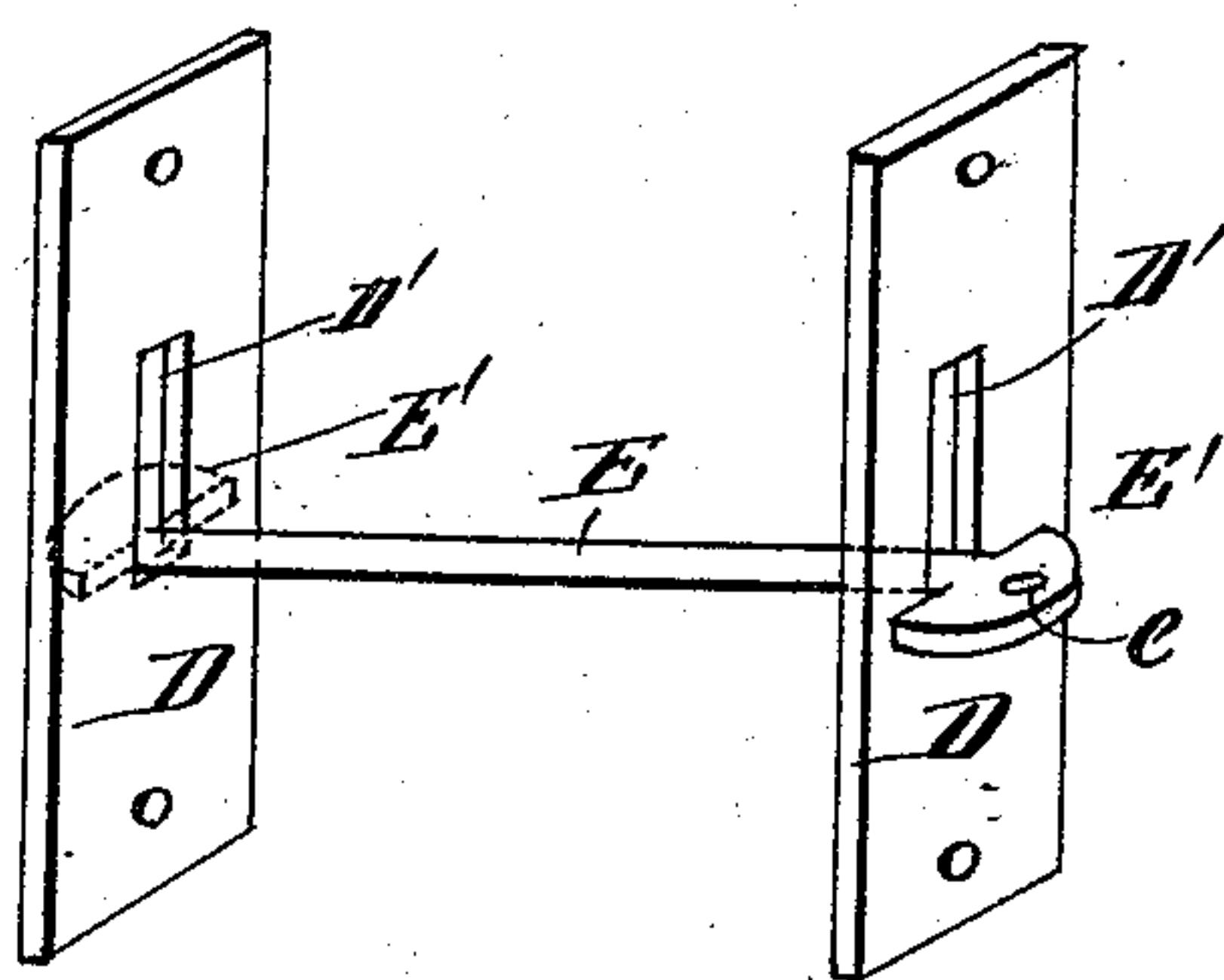
*Fig. 2*



WITNESSES:

*F. McArthur,*  
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*Fig. 3*



INVENTOR:

*T. Robinson*

BY

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ATTORNEYS



# UNITED STATES PATENT OFFICE.

THOMAS ROBINSON, OF MINNEAPOLIS, MINNESOTA.

## WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 442,783, dated December 16, 1890.

Application filed April 19, 1890. Serial No. 348,645. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS ROBINSON, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and

5 Improved Window-Screen, of which the following is a full, clear, and exact description.

My invention relates to improvements in removable window-screens; and the invention consists in the particular construction and

10 arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate

15 corresponding parts in all the figures.

Figure 1 is a perspective inside view of a window and window-frame with the screen embodying my invention secured in the window-frame. Fig. 2 is a detailed perspective

20 view of the window-screen, the same being in a partially-open position; and Fig. 3 is a detailed perspective view of the locking-plates and bolt.

I have shown a window-frame A, provided

25 with two window-sashes B and B', which move vertically in the window-frame between the strips *a* thereof, in the usual manner.

The window-screen is composed of two similar frames C, the width of the open united

30 frames corresponding to the width of the window and the height of the frame corresponding to the distance between the bottom of the upper sash B' and the window-sill, so that when the screen is in position in the window

35 the upper part of the frame will abut with the lower portion of the sash B'. The inner edges of the frames C are rabbeted, thus forming vertical shoulders *b*, which will interlock when the screen is opened, and the

40 frames C are hinged together at their inner edges by the hinges *d*.

Fixed to the central abutting stiles C' of the frames C are metal plates D, having vertical slots D' therein, the plates D being fixed

45 to the inner edges of the stiles—that is, to the parts next the central web of the screen-frames, so that said plates will be in horizontal alignment.

The stiles C' are provided with horizontal

50 bores opposite the slots of the plate D, as indicated by dotted lines in Fig. 2, so that when

the frames C are opened the bolt E may be inserted through the slots D' and through the stiles C'. The bolt E is provided at each end with a semicircular flattened head E', and the

55 length of the bolt corresponds to the thickness of the two stiles C', so that when the frames C are opened the bolt E may be inserted through the plates D and through the stiles C', with the bolt-heads E' in a vertical

60 position, and the bolt-heads may then be turned into a horizontal position, thus overlapping the edges of the slot D' and securely fastening the frames C in open position.

The frames C are provided with the ordinary screen-cloth, and fixed to the inner sides of the frames are suitable handles *f*, by which the frames may be pulled into open position. To insert the screen in a window, the lower

70 sash B is raised, and the screen, with the frames C in a partially-open position, as shown in Fig. 2, is placed beneath the upper sash B' in the window-frame A, and with the outer edges of the frames C abutting with the inner portions of the window-frame. Then

75 by taking hold of the handles *f* and pulling inwardly the central portion of the frames C will be closed tightly together, in which position they may be locked by the bolt E, as described above.

80 It will be seen that the screen will be entirely outside of the lower sash, so that the same may be raised and lowered without interfering with the screen.

I have shown my invention as fixed in the

85 lower portion of a window, in which position it is usually used; but it is obvious that it may be applied to the upper part of the window as well.

In the foregoing description it will be seen

90 that when the two frames C are locked together in the manner described they will be nearly as solid and substantial as a single frame, and that when taken from the window they may be folded together to be stored, and

95 will occupy but little space.

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

1. The combination, with two frames hav-

100 ing their inner edges rabbeted and hinged together at the said inner edges, said abut-

ting portions of the frames being provided with horizontal slots, as shown, of plates fixed to the frames adjacent to said slots, said plates having vertical slots therein, and a bolt adapted for engagement with the said plates, said 5 bolt having flattened heads arranged in the same plane, substantially as described.

2. A window-screen consisting, essentially, of the frames C, hinged together, as shown, 10 and provided with vertical shoulders b, said frames having the abutting stiles C' thereof provided with horizontal bores, the plates D,

fixed to the stiles C' and provided with vertical slots D', aligning with the bores of the stiles C', a bolt E, adapted to pass through the 15 stiles and slotted plates, said bolt having flattened heads E', and suitable handles f for operating the screen, substantially as shown and described.

THOMAS ROBINSON.

Witnesses:

SWAN A. STOHLTON,  
GUST. A. LUND.