

M. MILLER.
 CONVERTIBLE SCREEN DOOR.
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991,527.

Patented May 9, 1911.

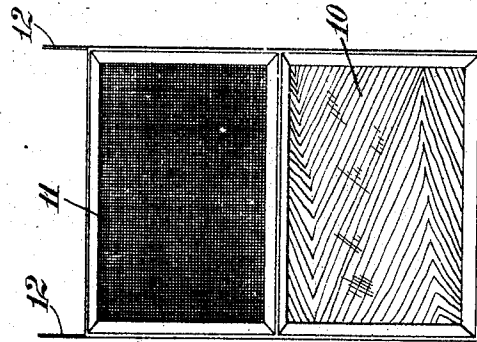


Fig. 4.

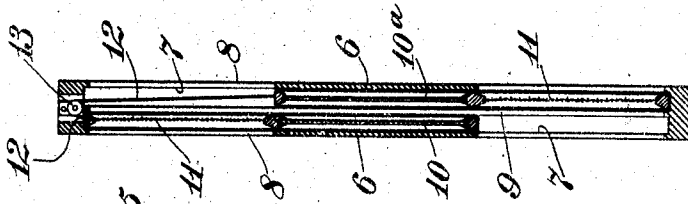


Fig. 3.

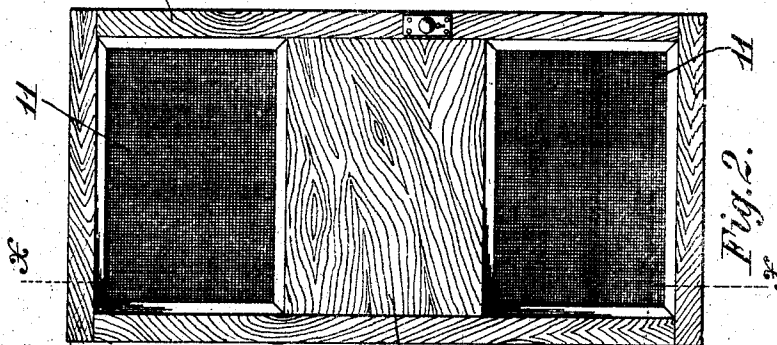


Fig. 2.

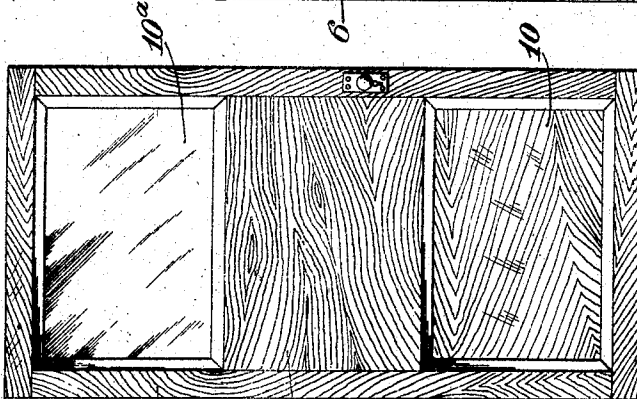


Fig. 1.

Witnesses
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UNITED STATES PATENT OFFICE.

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CONVERTIBLE SCREEN-DOOR.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MARVIN MILLER, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Convertible Screen-Doors, of which the following is a specification:

The object of this invention is to provide a door or other structure of the nature of a door that can be converted from ordinary door form into screen door form.

The invention is embodied in the construction herein shown and described and then particularly pointed out in the claims.

In the accompanying drawing Figure 1 is a view in elevation of the door in its ordinary or opening-closing form. Fig. 2 is a similar view showing the same door converted into a screen door. Fig. 3 is a vertical sectional view on the line $x-x$ Fig. 2 looking to the left. Fig. 4 is an elevation of one of the sliding members removed from the door.

In the views 5 designates the outer margin pieces of the door, said pieces being joined together to form a rectangular frame.

6, 6, designates two center panels placed horizontally opposite each other across the middle of the door so as to leave a space between them. These pieces 6, 6, are each equal in area to approximately one third of the area of the interior of the frame 5. Each of the inner vertical sides of the door are provided with two channels 7, 7, formed by outer stops 8, 8, and parting strip 9. In each of the channels 7 is placed to slide a frame comprising a solid portion, pane or panel 10 and a screen portion 11. Each of these portions is practically equal in area to a third of the area of the interior of the frame 5 so that if slid to position between the middle panels 6, 6, it is concealed thereby. The two frames having the parts 10-11 are placed in the channels 7, 7, in reverse position, that is to say in one case the screen portion is above and in the other the screen is below as best shown in Fig. 3. These two frames are connected at their corresponding upper corners by means of cords as shown at 12 said cords being passed around pulleys like that shown at 13 Fig. 3. These cords are of such length that when one of the sliding frames is pulled

down to its proper closing position the other is pulled up to its proper closing position. Because the said sliding frames are of substantially equal size and weight they balance each other and when either is depressed the other will remain in the position to which it is raised. Any suitable means, not shown, can be provided to lock the sliding members in either of their positions.

It will be observed from the construction described that when the screens are not to be used they are concealed between the middle panels 6, 6, and the door subserves the function of an ordinary closing or tight door. One or both of the solid members of the sliding frames can be a pane of glass as seen at 10^a Fig. 1. To convert the door from a solid or closing kind into a screen door therefore is an extremely simple operation and the perennial trouble and expense of hanging a screen door avoided.

What I claim is:

1. A door comprising, in combination, an open frame having a central panel, and two sliding members within said frame, each sliding member having a solid portion and a screen portion, said sliding members adapted to be moved to cover the areas of the door above and below said central panel with the screens or with the solid portions of the sliding member.

2. A door comprising, in combination, an open frame having a central panel, and two sliding members within said frame, each sliding member having a solid portion and a screen portion, and means connecting said sliding members whereby one can be operated to move the other into opening-closing position, substantially as described.

3. A door comprising, in combination, an open frame having two centrally arranged panels and two sliding frames within said frame working between said panels, said frames each containing a screen portion and a solid portion, and means connecting them whereby when one portion of the sliding member is moved to opening-closing position the corresponding portion of the other is also moved to closing position.

MARVIN MILLER.

Witnesses:

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