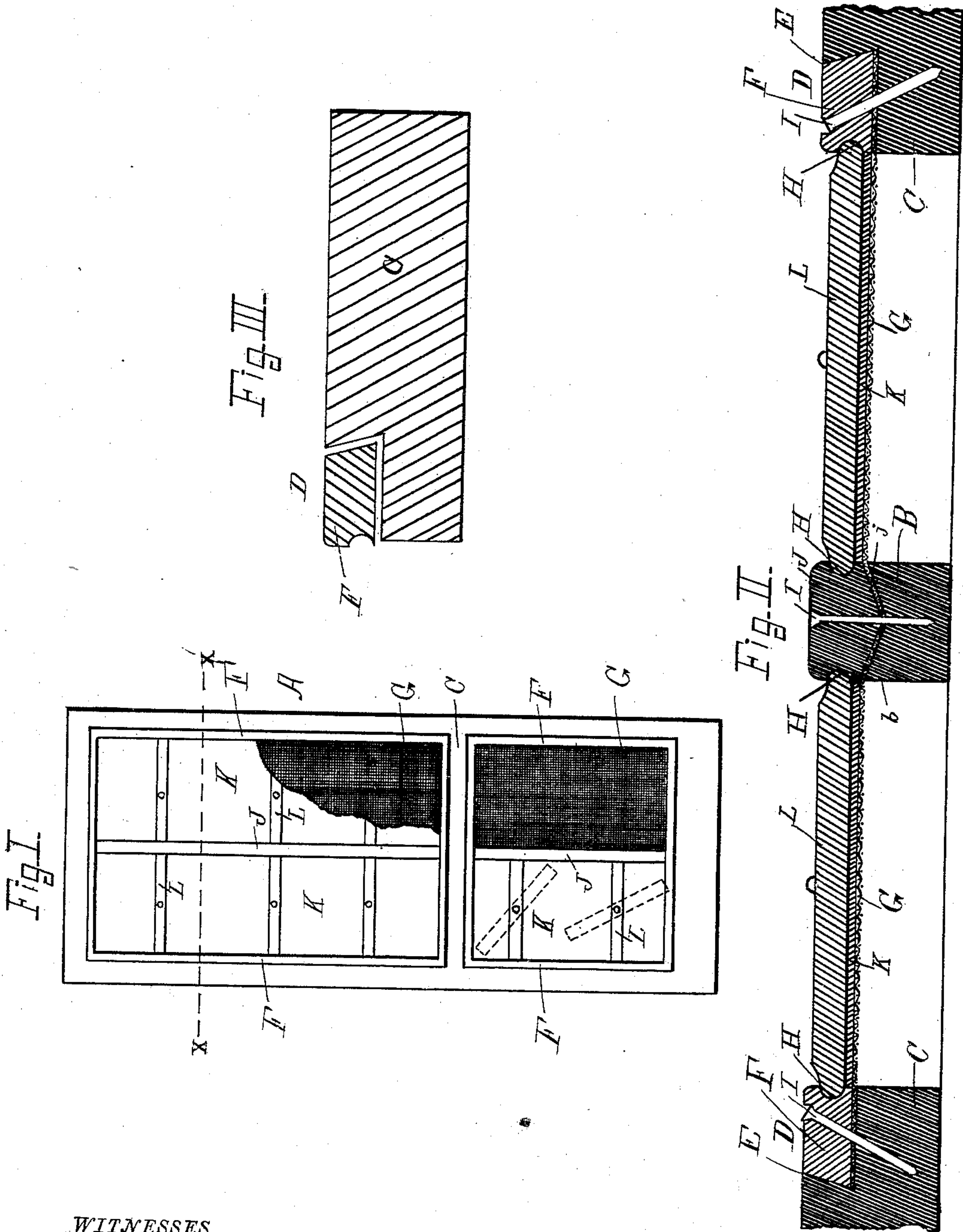


(No Model.)

C. LOETSCHER.
SCREEN AND STORM DOOR.

No. 409,750.

Patented Aug. 27, 1889.



WITNESSES.

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CHRISTIAN LOETSCHER, OF DUBUQUE, IOWA.

SCREEN AND STORM DOOR.

SPECIFICATION forming part of Letters Patent No. 409,750, dated August 27, 1889.

Application filed June 26, 1888. Serial No. 278,234. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN LOETSCHER, of Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Screen and Storm Doors; and I do hereby 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 pertains to make and use the same.

My invention relates to a combined screen and storm door.

The object of my invention is to provide a device of this character that will be of novel and simple construction.

A further object of my invention is to provide a screen-door that can be easily changed into a storm-door.

A still further object of my invention is to provide novel and effective means for securing the screen material within the said door, and also means for tightening the same.

The invention consists in the various details of construction and combinations of parts, hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a front view of a door embodying my invention. Fig. 2 is a sectional view of the same on line $x x$, and Fig. 3 is a sectional view of the frame and molding.

Referring to the drawings, A represents a screen-door consisting of two panels, both of which are divided by vertically-arranged central frame-pieces B.

C represents the door-frame. Upon the inner edge of the frame C, and throughout its length, a rabbet D is formed. The rear wall E of the said rabbet D is inclined inwardly from the side, as shown.

F represents a molding which is adapted to fit the rabbet D, and also to secure the screen material G within the frame. Upon the outer side of the molding, and near its lower edge, a groove H is formed, which extends the whole length of the said molding.

The screen material is secured in place by arranging its edges upon the lower wall of the rabbet, placing the moldings upon said screen material, and securing them in place by driving nails or equivalent devices I through the molding, screen material, and into the frame.

By arranging the rear wall of the rabbet at an incline and the molding of corresponding shape it will be seen that I am enabled to drive the nail I nearer the outer edge of the molding, thereby obtaining a better hold upon the screen material than could be obtained were the rear wall perpendicular, in which case the nail would have to be driven farther in the rear.

The front face of the central frame B is formed with a depression b . The molding J, which is secured upon the central frame B, is formed of one piece of material having on its rear face a projection j , which fits the depression b . The said molding is also provided with grooves H on both sides.

The molding J is secured to the central frame B by suitable devices driven centrally through it and into the said central frame, which presses the projection j into the depression b , and this carries the screen material with it, thereby tightening the same.

The devices for converting the screen-door into a storm door or window consist of panels K, of suitable material. The said panels are provided with cross-pieces L, which are pivoted thereto and are capable of being revolved. The cross-pieces L project a slight distance beyond the sides of the panel when in a horizontal position, so that when the panels are in position and the cross-pieces are turned to a horizontal position the ends of said cross-pieces will enter the grooves H and securely hold the panels in place. When it is desired to convert the storm-door into a screen-door, all that is necessary is to remove the panels.

From the foregoing description it will be seen that I provide a door which can be quickly and easily changed to suit the different conditions of weather, and also devices whereby to secure and tension the screen material within a screen-door.

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

1. In a screen-door, the combination, with the frame having a rabbet, the rear wall of said rabbet being inclined, of a molding adapted to fit said rabbet, the central frame having a depression, a molding having a projection secured thereon, and the screen ma-

terial adapted to be secured by said moldings, substantially as set forth.

2. The combination, with the frame having a rabbet, the rear wall of said rabbet being inclined rearwardly, of a molding having inner
5 faces which correspond to the shape of said rabbet, the outer face of which is provided with a longitudinal groove, screen material, and devices adapted to secure the said screen
10 material between the molding and the rabbet,

and the panel and button, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHRISTIAN LOETSCHER.

Witnesses:

W. S. WRIGHT,
ALEX SIMPLOT.