

A. J. COLLAR.

FLY ESCAPE.

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982,180.

Patented Jan. 17, 1911.

Fig. 2. Fig. 4. Fig. 1.

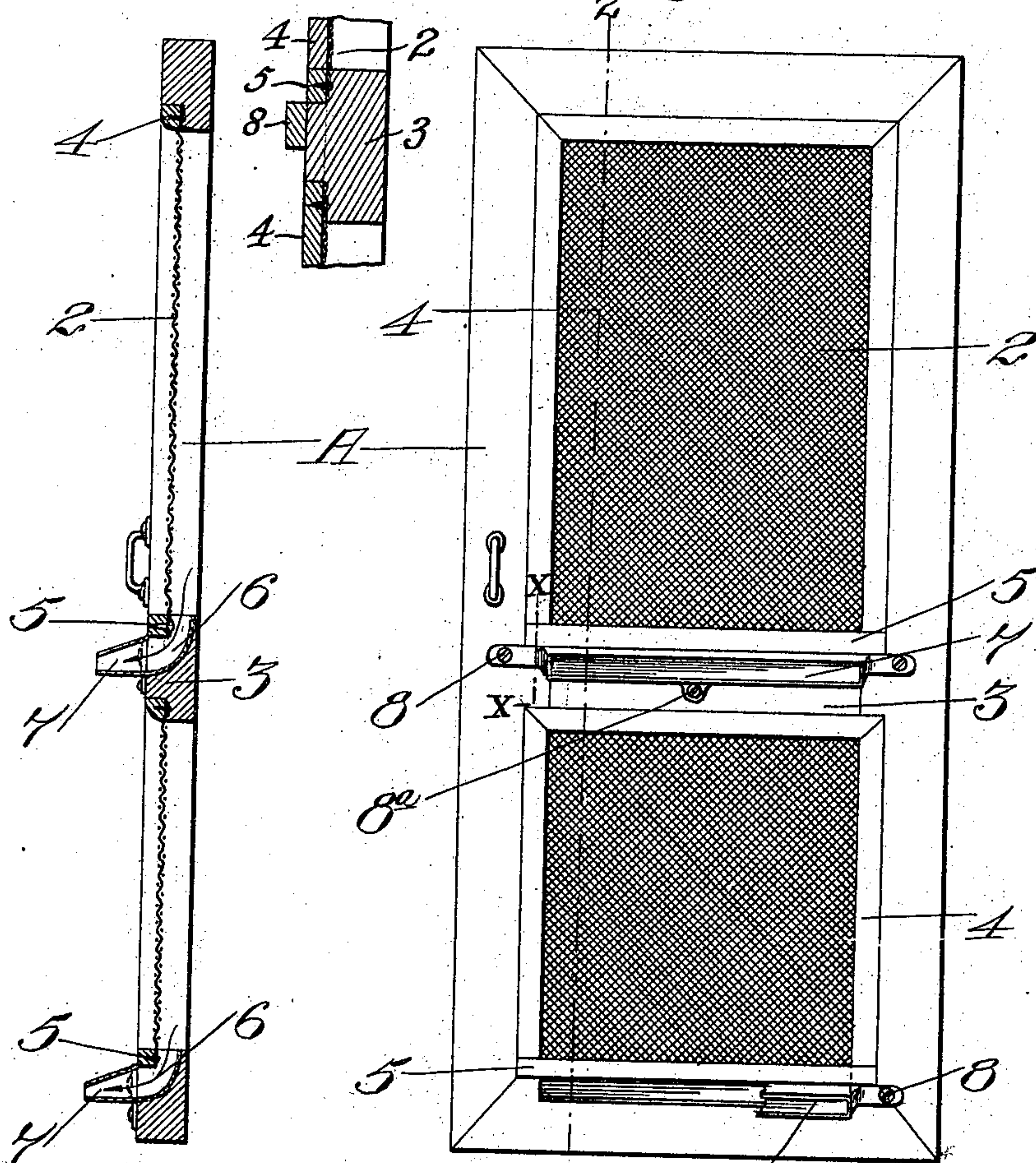
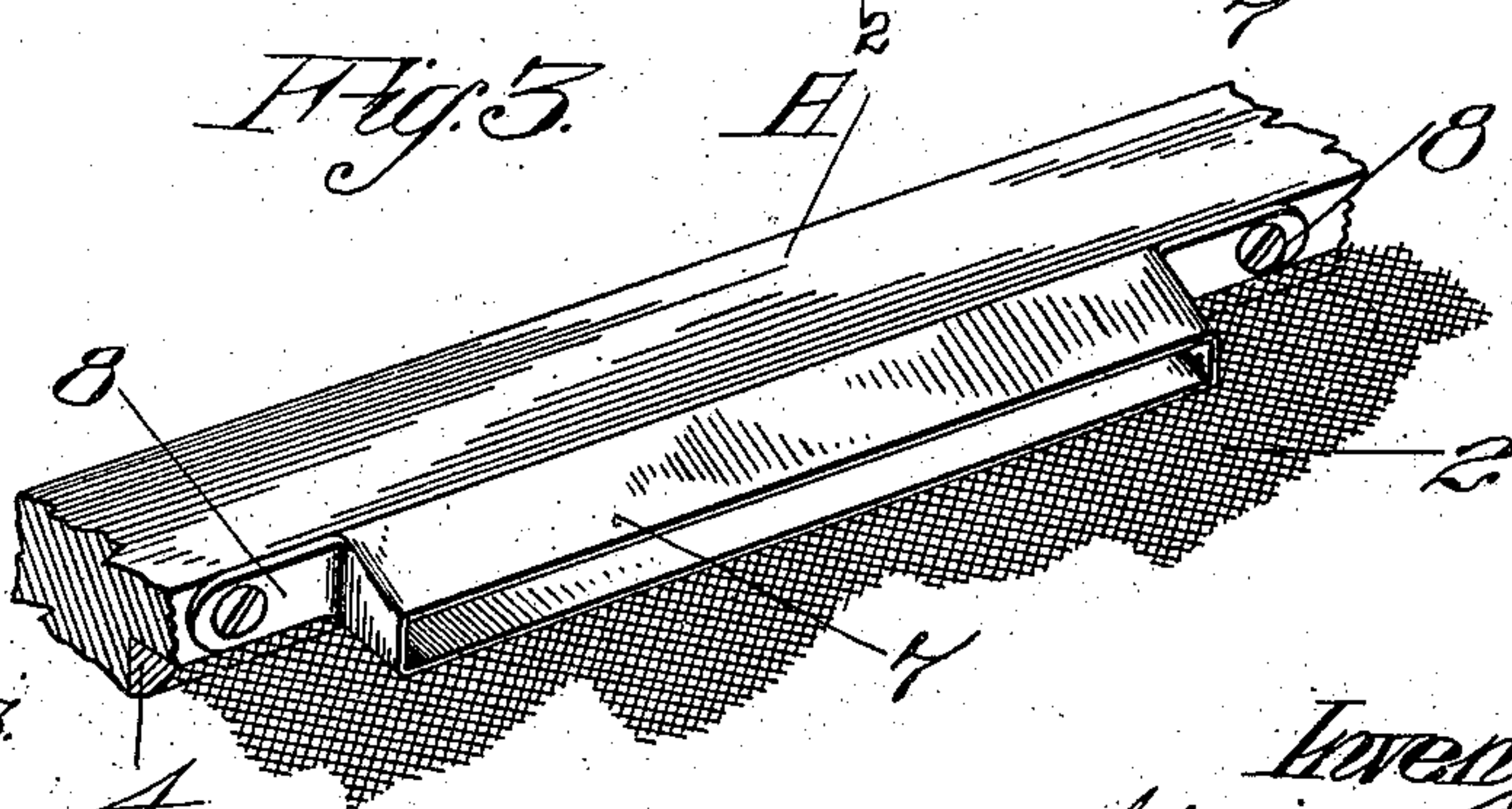


Fig. 5.



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UNITED STATES PATENT OFFICE.

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FLY-ESCAPE.

982,180.

Specification of Letters Patent. Patented Jan. 17, 1911.

Application filed June 11, 1909. Serial No. 501,636.

To all whom it may concern:

Be it known that I, ADONIRAM J. COLLAR, citizen of the United States, residing at Yreka, in the county of Siskiyou and State of California, have invented new and useful Improvements in Fly-Escapes, of which the following is a specification.

My invention relates to window and like screens with attachments whereby flies may escape from the interior outward, and means for packing such attachments so that the screens may be shipped to any destination without injury.

It also comprises details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a front view of a screen door showing the application of the fly-escape. Fig. 2 is a longitudinal section of same on the line 2—2 of Fig. 1. Fig. 3 is a perspective view, showing how the fly escape may be attached to the frame during shipment. Fig. 4 is an enlarged section on the line X—X of Fig. 1.

It is the object of my invention to provide screen doors having suitable means for the escape of flies from the interior to the outside, and to so construct such doors that they may be completed at the factory, and afterward placed in condition for shipment, with all the parts lying within the thickness of the door frame, so that the screens may be stacked up for shipment to occupy but small space, and without injury to the parts.

A is a frame made in the usual or any suitable manner, with vertical stiles and cross rails for the reception of the screen material 2.

The stiles and rails are rabbeted, or sunken around their inner edges so as to receive the stops 4, which serve to hold the screens in place, and also the cross-bars 5 which form a part of the screen-holding device, at the lower end of each section of the screen.

The upper edge of the lower rail, and the upper edge of the cross rail 3, have a concaved space 6 formed in them extending across and curving downwardly and outwardly from the inner upper edges as shown. This concave is preferably lined with metal, or otherwise formed with a smooth surface.

The cross-bar 5 has the screen fixed to it and is preferably made of metal, and is let into the frame just above the outer edge of

the concave, and is adapted to secure the wire screen, and hold it rigidly in place, at the same time a space is left between the metal lining of the concave, and the lower edge of this bar.

The holding stops 4, and the rail 3, when used, and the strips 5, are all let into rabbets, or channels, made in the door frame A as shown, so that they are flush with the outer face of the frame, and present no obstruction above the level of the frame bars A.

7 are short substantially rectangular direction chutes having lugs 8 upon each end, and a central lug 8^a projecting downward from the central portion. These chutes have a length substantially equal to the width of the screen, and the lugs 8 extend outwardly over the side stiles A of the door, and may be perforated to receive screws, or may be otherwise fastened to the door and the cross rail 3 so as to hold these chutes in position. These chutes may be slightly tapered from the inside outwardly, and the inner and wider edges fit respectively against the lower edges of the bars 5, and the bottom outer edges of the concaved grooves 6 which are made in the transverse rails; thus forming a channel which normally projects outwardly from the door, and which is continuous with the space below the lower edge of the screen, and between it and the concave previously mentioned. Flies which have obtained entrance into the house will attempt to escape through the screen, which arrests them, but the flies will gradually move downwardly until they reach the aperture at the bottom, through which they escape outwardly, and are conducted by the outwardly projecting chute or channels so far away from the screen door that when they do escape, they will fly away. The edges of these openings being thin, and so far away from the door, there is little or no liability of flies deliberately crawling over these edges and into the channel so as to enter the room. These doors having been manufactured and set up, as before stated, it is desirable to place them in condition for shipment without injury to the parts. The chutes 7 are therefore disengaged from their position on the outside of the door and screen, and are transferred to the inside of the stiles, where they are secured by screws or otherwise, and the thickness of the stiles, and the depth of the chutes is such that the latter will lie flush within the screens, and

against the inner edges of the stiles, and thus be out of harm's way. Doors thus constructed may be stacked up to any desired extent for shipment, and when they reach
5 their destination, the parts may be restored to their normal position.

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

10 1. The combination in a screen door, of an exterior frame and a cross rail, said cross rail having its upper edge concaved from the interior downwardly and outwardly, a
15 bar fixed across above the rail, a screen fixed to the door frame having its lower edge held in place by said bar, and an outwardly extending chute forming a channel registering with the space below the bar.

20 2. The combination of a screen holding frame having the cross rails concaved on the upper edges, transverse bars located above said rails, outwardly extending chutes registering with the spaces below the bars, and detachably secured to the door frame,
25 holding stops for the remaining edges of the

screen, said cross bars and holding stops and the screen edges being let into the frame flush with the outer face thereof.

3. In a screen, a frame having its inner periphery rabbeted or sunken, a screen adapted to rest upon said sunken edges and stops therefor, bars extending across the frame so as to form an open space between the upper edges of the cross rails and the screen, said bars and stops being substantially
35 flush with the exterior surface of the frame, and serving to secure the edges of the screen, transverse chutes registering with the openings formed by the bars and rails, and detachably secured to the frame, means
40 by which said chutes may be attached to the inner edges of the frame, and below the level of its inner surface.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.
45

ADONIRAM J. COLLAR.

Witnesses:

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