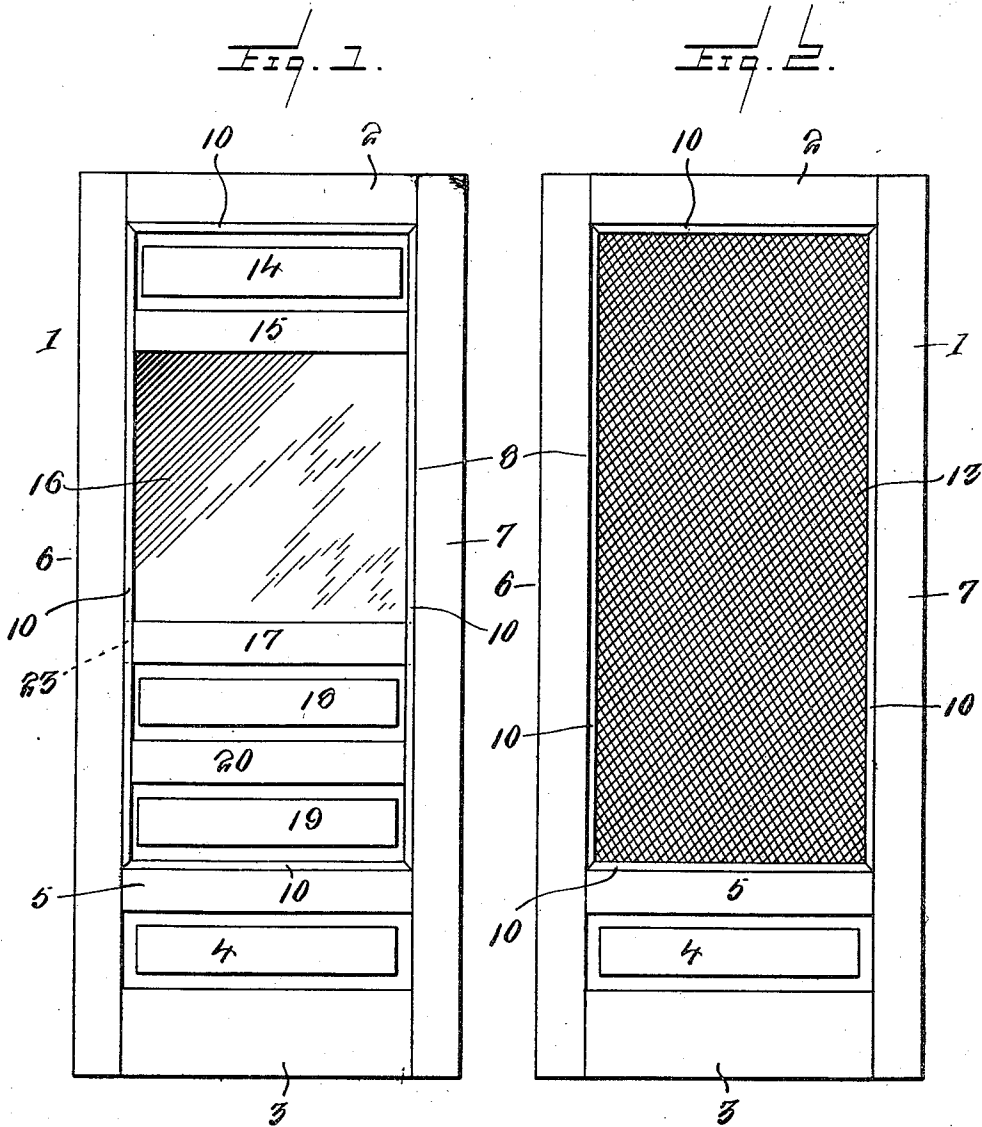


L. HANSEN.
 COMBINED SCREEN AND STORM DOOR.
 APPLICATION FILED AUG. 9, 1910.

1,022,547.

Patented Apr. 9, 1912.

2 SHEETS—SHEET 1.



Witnesses
 E. R. Ruppert
 W. J. North

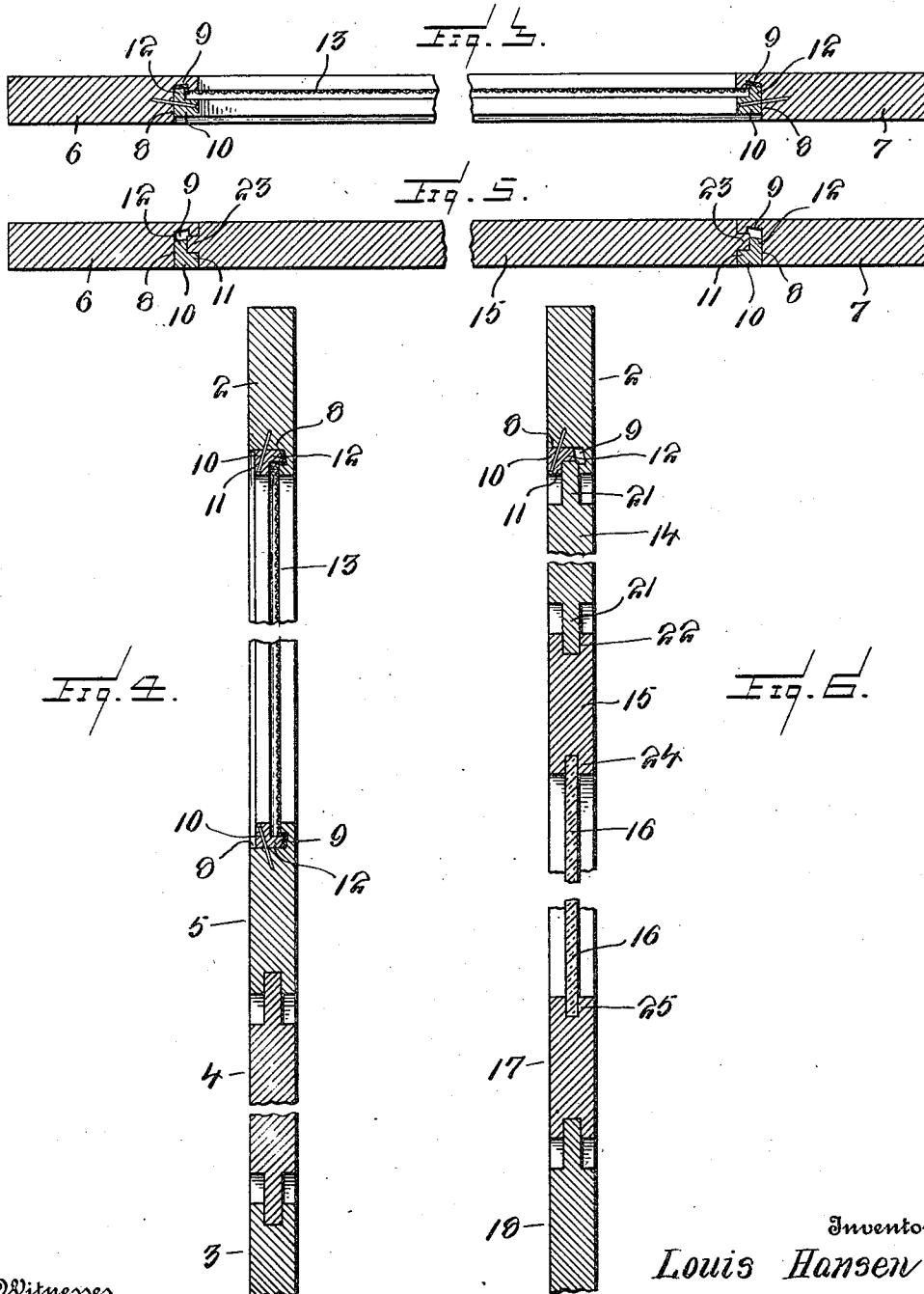
Inventor
 Louis Hansen
 By Victor J. Evans
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UNITED STATES PATENT OFFICE.

LOUIS HANSEN, OF OMAHA, NEBRASKA.

COMBINED SCREEN AND STORM DOOR.

Specification of Letters Patent.

Patented Apr. 9, 1912.

1,022,547.

Application filed August 9, 1910. Serial No. 576,284.

To all whom it may concern:

Be it known that I, LOUIS HANSEN, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented new and useful Improvements in Combined Screen and Storm Doors, of which the following is a specification.

This invention relates to improvements in doors, and the primary object of the invention is to construct a door frame wherein the rectangular panels may be readily removed and screens substituted therefor.

Another object of the invention is to construct a door of this class which may be made up of panels and glass if desired.

With the above, and other objects in view, which will appear as the description progresses, the invention resides in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of a door constructed in accordance with the present invention, showing the same arranged as a storm door. Fig. 2 is a similar view showing the panels replaced by a screen. Fig. 3 is a transverse sectional view of Fig. 2. Fig. 4 is a vertical longitudinal sectional view of Fig. 2. Fig. 5 is a transverse sectional view through Fig. 1. Fig. 6 is a central longitudinal sectional view of Fig. 1.

In the accompanying drawings the numeral 1 designates the parts which comprise the door proper. These parts comprise a top rail 2, a bottom rail 3, a panel 4, a transverse rail 5 and vertical stiles 6 and 7. The top and bottom rails, panel and cross rail are connected to the stiles in the usual manner, such as by tongues and grooves, pins or the like. The stiles 6 and 7 as well as the rails 2 and 5 are each provided upon their inner faces with a rabbet or cut away portion 8, and each of the said rabbets or cut away portions communicate with each other. The right angularly arranged cut away portion or rabbet is further provided with a pocket 9, the same having its inner face inclined or beveled, and these pockets also extend entirely around the stiles 6 and 7 and the rails 2 and 5.

The numeral 10 indicates the retaining molding cleat. This molding cleat 10 com-

prises a substantially rectangular portion 11 which is provided with an extending tongue 12, the latter being of a size and shape corresponding to that of the pocket 9.

We will suppose that the panels, etc., making up the door illustrated in Fig. 1 of the drawings are removed and it is desired to replace the said panels with a screen 13. The screen 13 is cut to a width to correspond to the distance between the pockets 9 of the stiles 6 and 7 and of a length corresponding to the distance between the pockets 9 of the rails 2 and 5. It will be noted that by merely positioning the tongues within the pockets and tacking the same to the frame of the door the screen is effectively and securely positioned upon the door and the same may be readily removed therefrom by withdrawing the molding cleat.

In the device illustrated in Fig. 1 of the drawings the numeral 14 designates the upper panel, 15 the upper rail, 16 the glass for the door, 17 the panel supporting the lower portion of the glass, 18 and 19 the lower panels, and 20 the rail intervening between the said lower panels. The upper panel 14 is adapted to be received within the pockets 9 of the stiles 6 and 7 and the upper rail 2, the same being secured thereto through the medium of the molding cleat 10. It will be noted that the reduced portions of the said rail are contacted by the reduced portions 21 of the said panel. The lower reduced portion of the said panel 21 is adapted to be received within the upper longitudinally extending openings 22 of the rail 15. The ends of the said rail are provided with reduced extensions 23, and these extensions are adapted to be engaged by the beads upon this side of the door. The glass 16 is positioned between the lower channel 24 of the rail 15 and the upper channel or groove 25 of the rail 17. It is to be understood that all of the rails as well as all of the panels are of a precise structure, and the panel 18 engages the lower channel of the rail 17 and the upper channel of the rail 20, while the panel 19 engages the lower channel of the panel 20 and the groove provided by the rabbet 8. It will be noted that by providing the rails with the cut away portions adjacent their edges the said bead can be stripped around the entire opening, and

that any number of rails and panels as well as glass plates may be inserted to provide the door. It will be still further noted that the door can be converted from a screen to a storm door by a person inexperienced in carpentry and that the retaining beads as well as the pockets require no great amount of labor in their formation.

From the above description, taken in connection with the accompanying drawings, it will be noted that I have provided an extremely simple and effective device for the purpose intended, and while I have illustrated and described the preferred embodiment of the improvement, as it now appears to me, minor details of construction, within the scope of the following claim may be resorted to if desired.

Having thus fully described the invention, what I claim as new is:—

A door frame having its side stiles and upper and lower rails rabbeted upon one of their faces, said rabbet portion being provided with a pocket, flexible panels for the door, and a retaining molding cleat formed with an off-set portion adapted to be inserted within the said pocket, whereby the flexible panel is wedged between the walls of the same which effectively grips it and holds the same in position.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS HANSEN.

Witnesses:

J. H. McMILLAN,
E. G. BUGH.