

June 18, 1946..

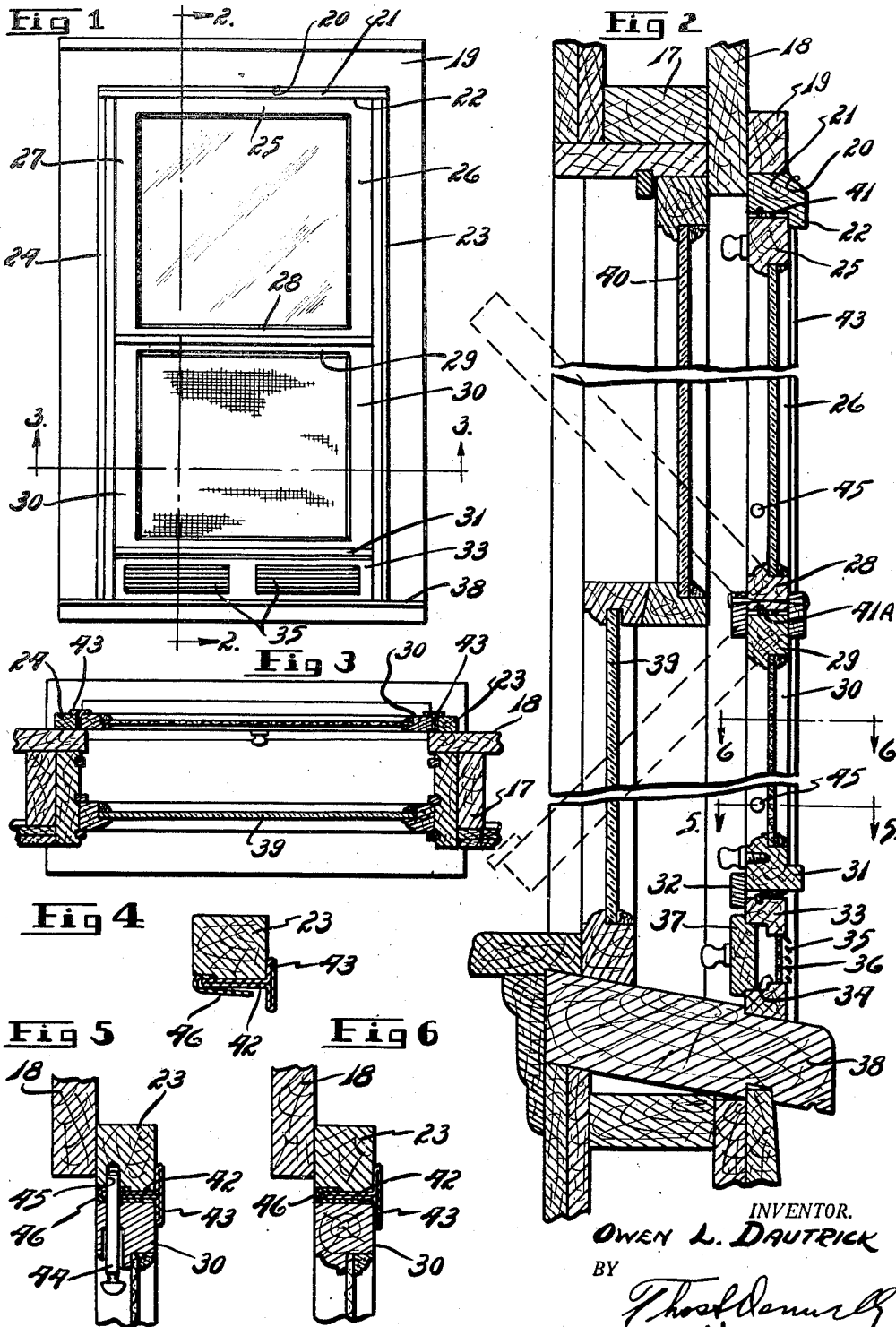
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2,402,242

STORM WINDOW CONSTRUCTION

Filed April 7, 1944

2 Sheets-Sheet 1



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Fig 7

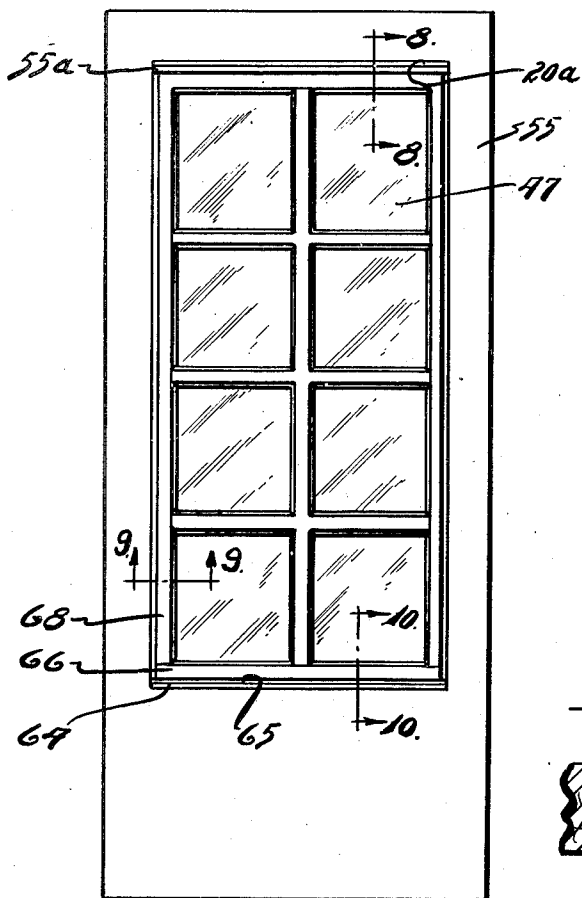


Fig 11

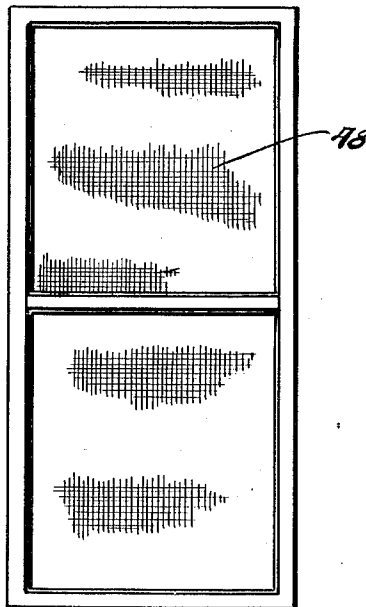


Fig 9

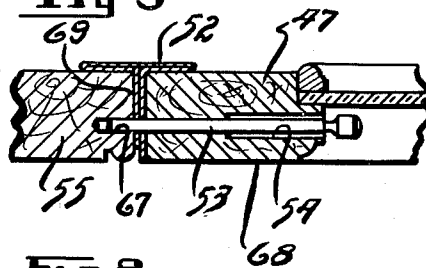


Fig 10

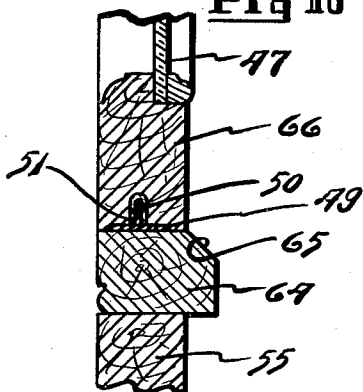
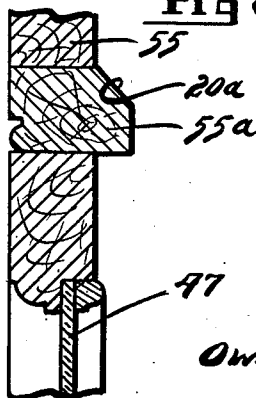


Fig 8



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STORM WINDOW CONSTRUCTION

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3 Claims. (Cl. 160—182)

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My invention relates to a new and useful improvement in a storm window construction and has for its object the provision of a storm window so constructed and arranged that it may be removed and replaced from the interior of the building.

Another object of the invention is the provision of a storm window construction having a removable ventilating strip at the bottom thereof.

Another object of the invention is the provision of a storm window construction whereby the sashes thereof will be sealed against air leakage when mounted in position.

Another object of the invention is the provision of a storm window construction and its mountings so arranged that either of the sashes may be removed independently of the other.

Other objects will appear hereinafter.

It is recognized that various modifications and changes may be made in the detail of structure illustrated without departing from the spirit and scope of the invention and it is intended that such variations and modifications shall be embraced within the scope of the claims forming a part hereof.

Forming a part of this specification are drawings in which,

Fig. 1 is a front elevational view of the invention;

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1;

Fig. 3 is a sectional view taken on line 3—3 of Fig. 1;

Fig. 4 is a fragmentary enlarged sectional view illustrating the sealing strip used in the invention;

Fig. 5 is a fragmentary sectional view taken on line 5—5 of Fig. 2;

Fig. 6 is a fragmentary enlarged sectional view taken on line 6—6 of Fig. 2;

Fig. 7 is a rear elevational view of the invention;

Fig. 8 is an enlarged fragmentary sectional view taken on line 8—8 of Fig. 7;

Fig. 9 is a fragmentary enlarged sectional view taken on line 9—9 of Fig. 7;

Fig. 10 is an enlarged fragmentary sectional view taken on line 10—10 of Fig. 7.

Fig. 11 is a front elevational view of a screen used with the invention.

I have illustrated the invention mounted in a window frame embodying the parts 17, 18 and 19. The invention comprises a supplementary frame embodying the upper rail 21 beveled at its upper edge as at 20 and having the depending tongue

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22. Side rails 23 and 24 are provided on this supplementary frame which is nailed in position over the window opening of the window frame. Fitted in this supplementary frame are sashes, the upper sash embodying the top rail 25, side rails 26 and 27 and the bottom rail 28. The lower sash embodies the top rail 29, the side rails 30 and the bottom rail 31. Positioned beneath the supplementary sash is a strip 33 overlapping which is the strip 32 carried by the bottom rail 31. This strip 33 which rests upon the sill 38 is provided with the opening 34 closed at the outer side by the ventilating louvers 35 and the screen 36. A block 37 serves as a closure for the opening 34. The storm window is positioned exterior of the window sashes 39 and 40, which are conventional in buildings. Mounted on the side rail 26 is a strip 42 of metal doubled upon itself as at 43 to provide the T-shaped structure shown in Fig. 5. A locking plunger 44 is carried by the sashes and this locking plunger 44 may be slidably projected into an opening 45 formed in the side rails 26 or 27. A strip of metal 46 is doubled upon itself and sprung outwardly at one end to provide a yieldable sealing strip along the sides so that the windows are sealed at the sides. A sealing strip 41 is mounted on the upper rail 21 for sealing purposes and a similar strip 41a is mounted on the lower rail 28 for sealing purposes.

As shown in Fig. 2, the window may be swung inwardly in the dotted line positions for removal so that the storm window may be removed. When the invention is used in the winter time the upper sash and the lower sash which are mounted in the frame 21 would both be glazed to provide a pair of windows. In summer time the lower glazed sash would be removed and replaced with a screen, as most users do not require a screen in the upper half of the structure. If a screen should be desired in the upper half, it is obvious that the upper glazed portion could also be removed and replaced with a screen.

In Fig. 7 and in Fig. 11, I have illustrated the invention applied to a storm door and to a screen door. Consequently, the invention may be said to cover a combination storm sash and window screen, a storm window construction and a combination storm and screen door. In Fig. 7, the numeral 55 indicates the door which is swingably mounted in the usual way and in Fig. 7 I have shown the glazed insert 47 which serves as a storm door. This member 47 may be removed and replaced with the screen structure 48 shown in Fig. 11. From the sectional view shown in Figs. 8, 9 and 10, it will appear that the various

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features referred to in the storm sash construction shown in Figs. 1 to 6 or the window sash construction shown in Figs. 1 to 6 are applicable to the structures shown in Figs. 7 and 11. For instance, as shown in Fig. 8, the door 55 is provided with the overhanging deflecting portion 55a having the inclined surface 20a corresponding to the inclined surface 20 shown in Fig. 2.

In Fig. 10 the sill 64 which forms a part of the door 55 is provided with the inclined shedding surface 65. The T-shaped sealing member embodying the trunk 50 and the arms 49 serve to seal between the bottom rail 66 of the window sash 47 or the screen sash 48, as the case may be, and the sill 64, this bottom rail 66 having a groove or slot 51 in which the tongue 50 engages. The locking mechanism illustrated in Fig. 5 is also indicated at being present in Fig. 9. The door 55 is provided with a socket 67 into which the pin 53 slidable in the passage 54 is adapted to engage, this passage 54 being formed in a side rail 69 of either the storm door 47 or the screen door 48. As shown in Fig. 9, the sealing mechanism illustrated in Fig. 4 is utilized embodying the doubled over T-shaped member 52 and the flexed sealing strip 69.

Consequently, the same advantages as far as sealing and easy mounting are concerned, which are present in the storm sash and screen combination, are also present in the storm door and screen door construction.

By having the storm sash or the screen shown in Figs. 1 to 6, inclusive, removable from the inside of the building, it is very easy to mount the storm sash and screen in windows which are in the elevated floors. Many contractors refuse to contract for mounting of storm sash and screen in windows above the second floor, as it is difficult to reach them with a ladder and it is expensive to mount a scaffolding—either of which

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would be required where it is necessary to mount from the outside.

What I claim as new is:

1. A storm window construction of the class described adapted for mounting on a window frame and comprising a supplementary frame mounted permanently on said window frame and having an inwardly projecting flange on a side thereof, said frame being shorter than the window frame on which positioned; a separate strip positioned below said supplementary frame for filling the opening and having a ventilating opening formed therein; and a louver and screen covering the outer side of said ventilating opening.

2. A storm window construction of the class described adapted for mounting on a window frame and comprising: a supplementary frame mounted permanently on said window frame and having an inwardly projecting flange on a side thereof, said supplementary frame being shorter than the window opening in which positioned; a separate strip positioned below said frame for filling the opening and having a ventilating opening formed therein; and a louver and screen covering the outer side of said ventilating opening and a removable closure for closing said ventilating opening.

3. A window construction of the class described adapted for mounting on a window frame and comprising: a supplementary frame having side rails and a top rail; a pair of sashes mounted in said supplementary frame; a wear strip on the inner side of each of said side rails and doubled upon itself to provide a T-shaped structure for overlying the outer surface of said rails and the outer surface of the sashes mounted in said frame.

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