(No Model.) 2 Sheets—Sheet 1.

S. J. ANDERSON.

WINDOW SCREEN.

No. 413,010. Patented Oct. 15, 1889.

Fig. 1.

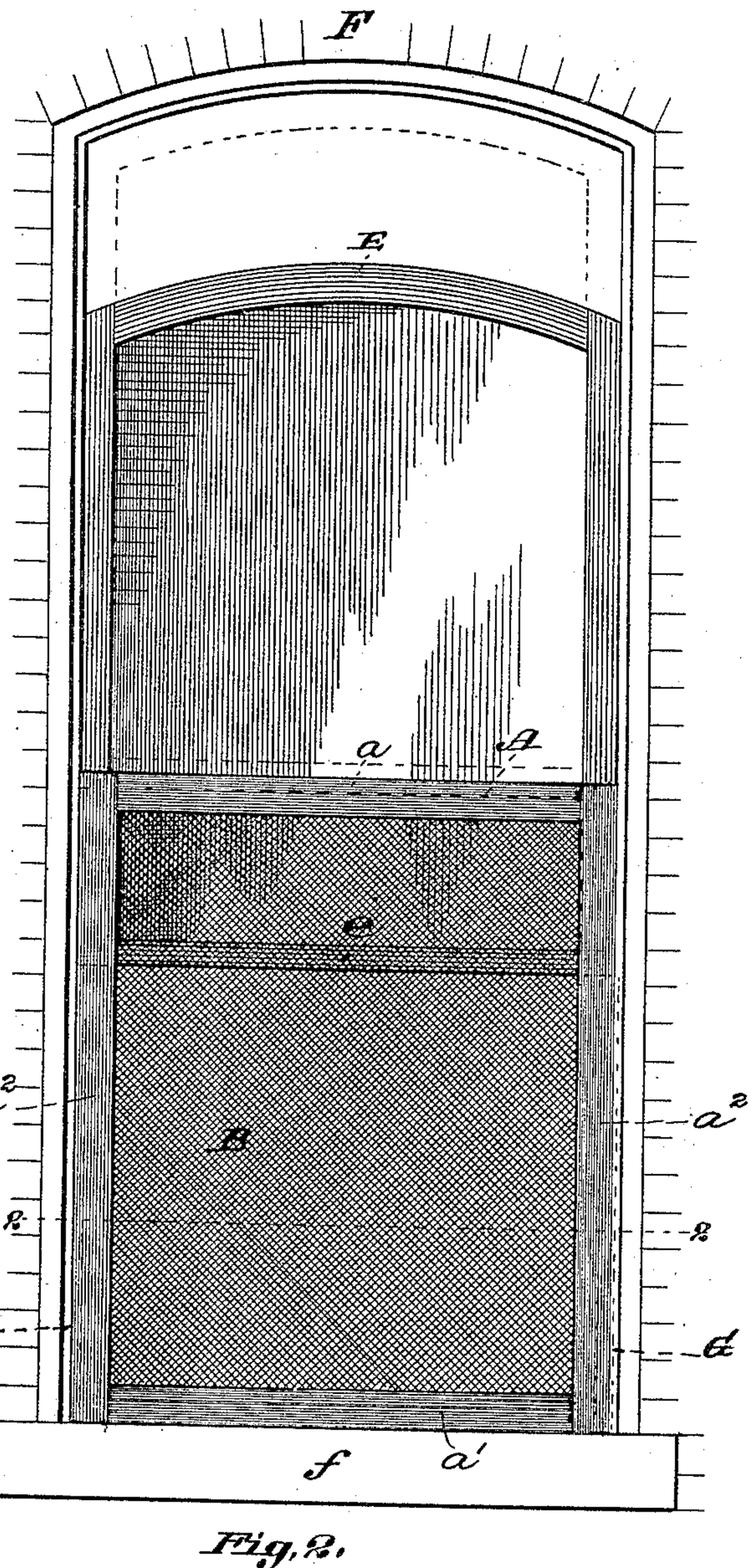
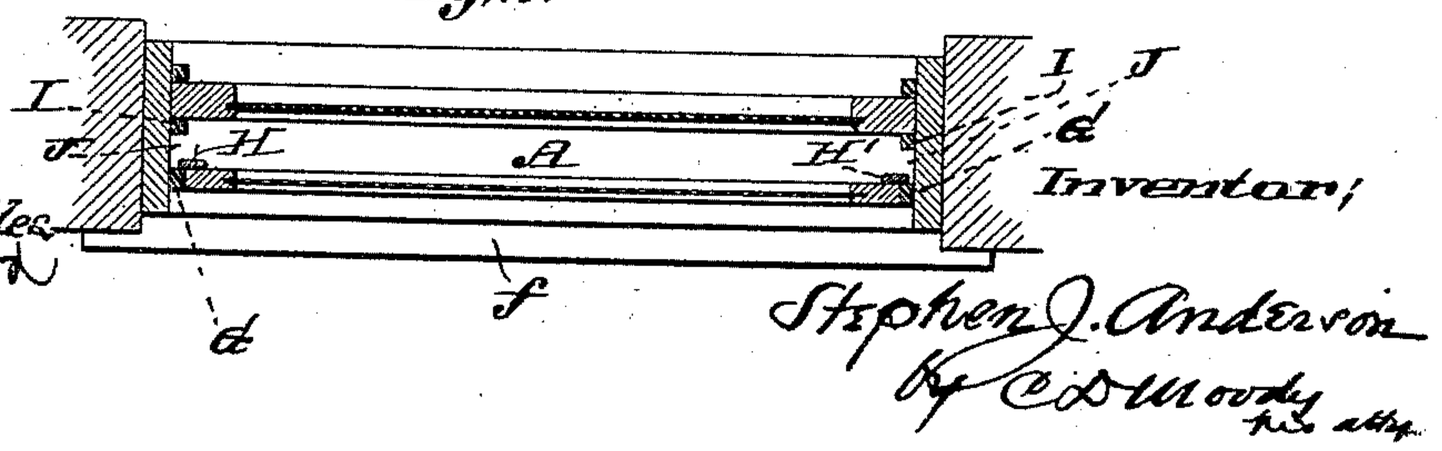


Fig. 2.



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his Atty.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

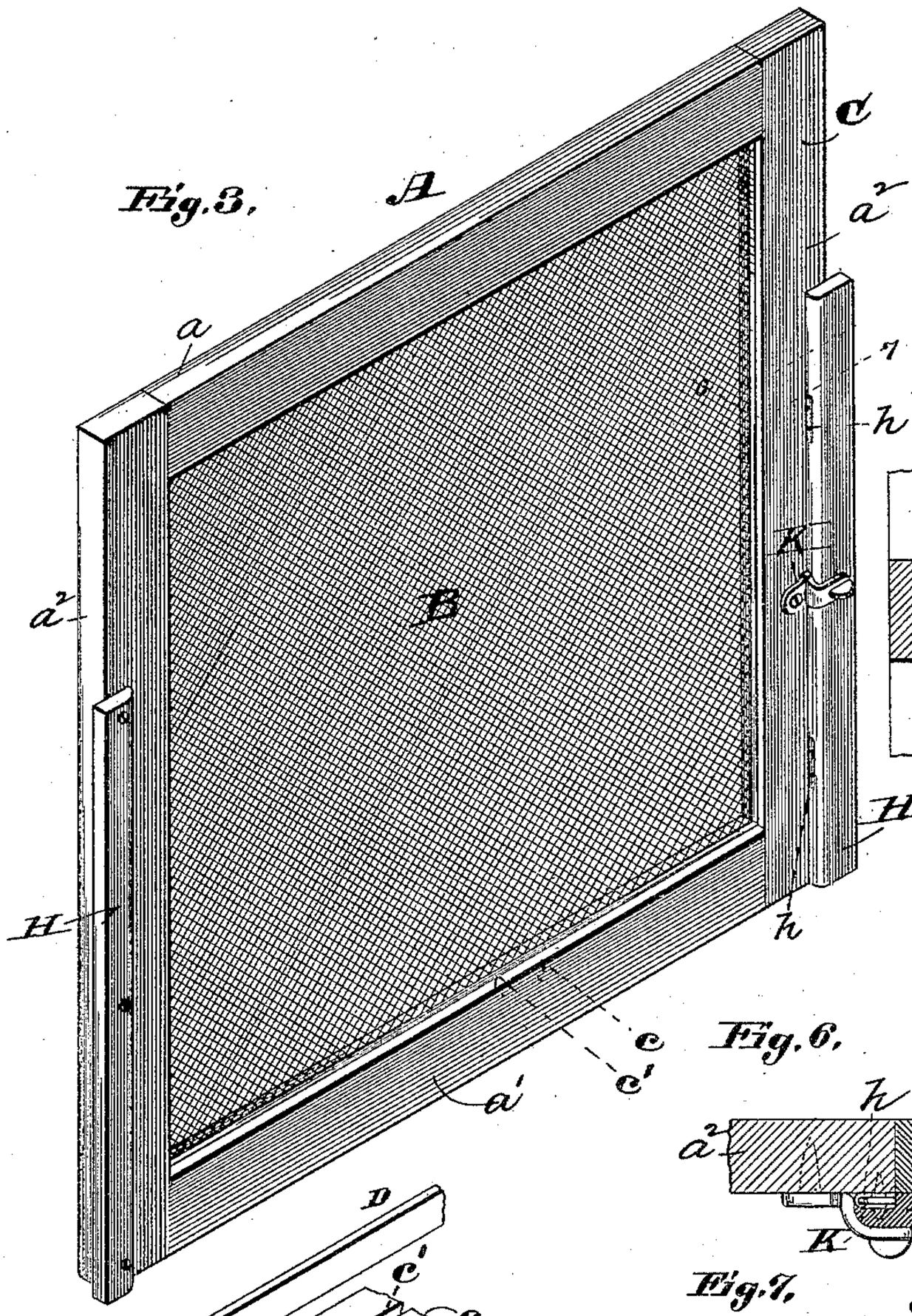


Fig. 9.

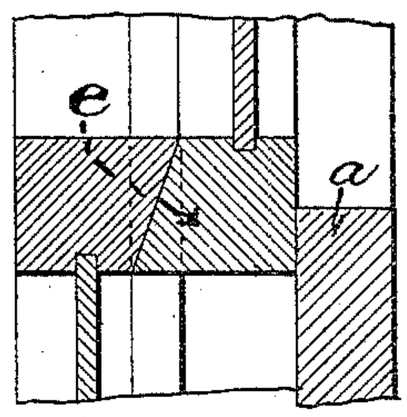


Fig. 4.

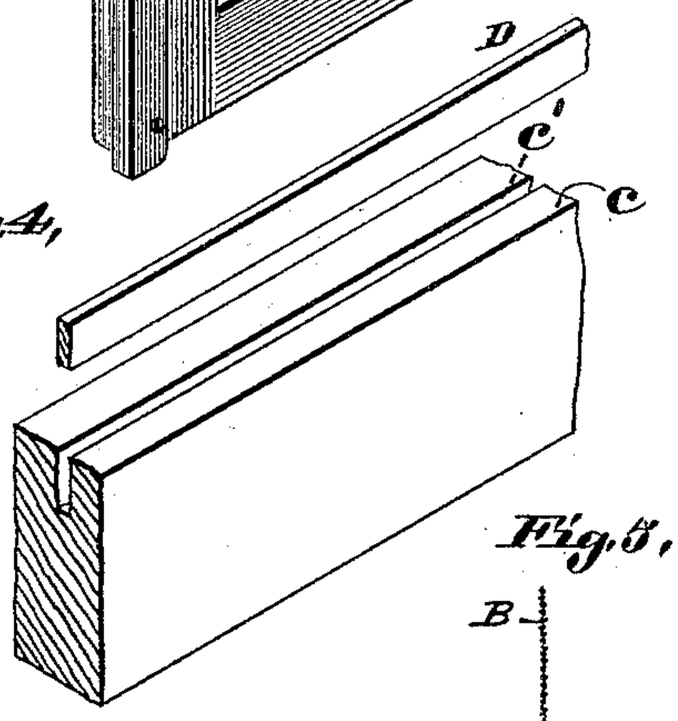


Fig. 6.

Fig. 7.

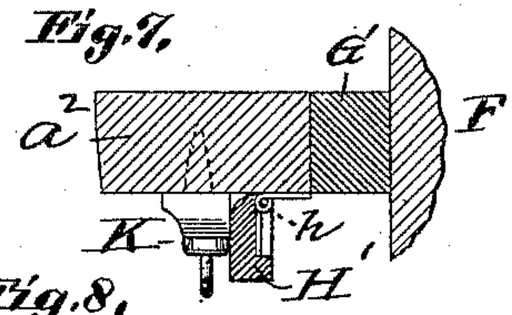


Fig. 8.

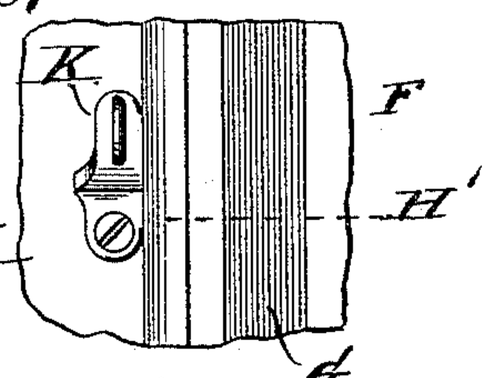
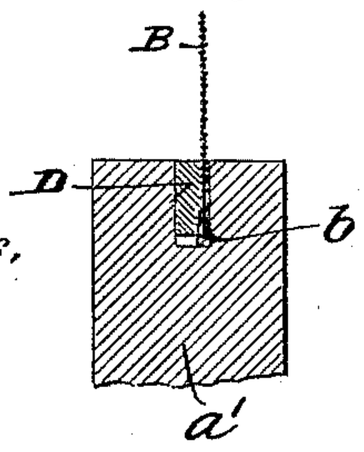


Fig. 5.



Attest;
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Inventor;
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by Edmoody
his attys

UNITED STATES PATENT OFFICE.

STEPHEN J. ANDERSON, OF ST. LOUIS, MISSOURI.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 413,010, dated October 15, 1889.

Application filed June 5, 1889. Serial No. 313,197. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN J. ANDERSON, of St. Louis, Missouri, have made a new and useful Improvement in Window-Screens, of which the following is a full, clear, and exact description.

The improvement relates to the means for holding the screen in the window, substantially as is hereinafter set forth and claimed, aided by the annexed drawings, making part of this specification, in which—

Figure 1 is an outside elevation of a window having the improved screen in position. The upper sash of the window is dropped part way down. Fig. 2 is a horizontal section on the line 2 2 of Fig. 1; Fig. 3, a view in perspective of the improved screen, looking toward the inner side thereof; Figs. 4 to 9, details, Fig. 4 being a view in perspective showing a portion of the screen-frame and wedging-strip, the parts being detached from each other; Fig. 5, a cross-section showing a portion of the screen-cloth inserted in the screen-frame; Fig. 6, a horizontal section on the line 6 7 of Fig. 3, the adjustable screen-fastening strip being arranged to confine the screen in the window-frame; Fig. 7, a similar section, the fastening-strip being arranged to leave the screen free to be removed from the window-frame; Fig. 8, an inside elevation of the parts shown in Fig. 7, and Fig. 9 a vertical section in the direction of the thickness of the window and at the level at which the upper and lower sashes meet and showing the relative position of the top of the window-screen.

The views are upon various scales, and the same letters of reference denote the same parts.

Saving as it is modified or supplemented by the improvement under consideration, the screen A is of the usual construction.

B represents the screen-cloth, and C the screen-frame. The cloth and frame are united as follows: The frame along its inner edge *c* is grooved. The groove *c'* is wide enough to admit the folded cloth-edge *b* and a wedging-strip D, Figs. 4 and 5, and the screen-cloth is attached to the screen-frame by folding the edge of the cloth and inserting it in the groove *c'*, and then forcing the strip D into the groove alongside the cloth-edge, substantially as is shown in Fig. 5. By this means the screen-cloth is not only thoroughly secured in the screen-frame, but also so that a neat appearance is imparted to the screen, and no projection formed upon either the inner or the outer face of the screen-frame to come in the way of the window-frame.

The screen when in position in the window is arranged without the plane in which the upper sash E of the window F, Figs. 1 and 2, works, and the top *a*, Fig. 9, of the screen comes against the bottom rail *e* of the sash E, and the bottom *a'* of the screen rests upon the window-sill *f*, Figs. 1 and 2, and the screen at its sides comes between the outer window-strips G G, Figs. 1 and 2. To hold the screen in this position, it is provided at its sides a^2 a^2, respectively, with the strips H H', Figs. 2 and 3. These last-named strips are attached to the inner face of the screen-frame, and they respectively project laterally from the screen-frame, and are thereby made to come against the inner face of the window-strips G G, respectively, substantially as shown in Fig. 2. By this means the screen is held from falling outward from the window. At the same time it is practically confined in the opposite direction, partly by reason of its top *a* coming, as stated, against the rail *e* of the sash E, and partly by reason of its bottom *a'* coming upon the window-sill, which in many instances inclines downward, and thus holds the screen in place; and in no event, as long as the strips H H' project as described, can the screen at its lower end be moved inward beyond the point at which the screen-strips H H' encounter the middle window-strips I I, Fig. 2.

The strips H H' are designedly made thinner than is the space J between the outer and the middle window-strips, for the purpose, partly, of enabling the screen at its lower end to be moved a limited distance inward in the window-frame, for by first shifting the lower end of the screen inward a short distance the screen can be more readily removed from its position when it is desired to take it out of the window.

To enable the screen to be inserted in its place in the window, one, at least, of its strips H H' is made adjustable, so that the strip H', Figs. 3, 6, 7, and 8, can be shifted into a position in which it does not project laterally from

the screen-frame. The most convenient means to this end are shown in the drawings. The strip H′ is hinged to the screen-frame at *h h*, so that it can be turned into the position shown in Figs. 3 and 6, or be turned back into the position shown in Figs. 7 and 8. Before the screen is placed in position the strip H′ is adjusted as in Figs. 7 and 8, and after the screen has been inserted between the window-strips the strip H′ is turned on its hinges *h* into the position of Figs. 3 and 6, and to secure the strip in this last-named position a catch K, Figs. 3, 6, 7, and 8, which is pivoted to the screen, is turned around on its pivot to lap upon and press against the inner face of the strip H′, as shown in Figs. 3 and 6, and thereby bind the strip in that one of its positions. The catch is shaped, substantially as is shown, to fit the strip. Before the screen can be removed from the window the catch and strip H′ must be turned back into the position of Figs. 7 and 8.

The strips H H′ do not extend to the top of the screen, thereby making provision for the upper sash E to be dropped, as shown in Fig. 1.

I claim—

1. The combination, with the screen-frame, of the strip H, rigidly secured to the inner surface of one side rail of the said frame and projecting laterally outward therefrom, and the strip H′, projecting similarly outward from the opposite side rail of the frame and attached to said side rail by the hinges *h*, so that it can be turned inward on the rail, substantially as specified.

2. The combination, with the screen-frame, of the strips H H′, attached to the inner surfaces of the opposite side rails of the frame and projecting laterally outward therefrom, the hinges *h*, connecting the strip H′ to the corresponding side rail of the frame, and the catch or detent K, pivoted to said rail, substantially as specified.

3. The combination, with the screen-frame, the strip H, rigidly secured to one side rail thereof, the strip H′, attached to the opposite side rail of the frame, and the hinges *h*, connecting the strip H′ to the said side rail, of the upper sash E, the lower rail of which forms a rest for the upper rail of the screen-frame, and the window-strips G G, against which the strips H H′ bear, substantially as specified.

Witness my hand this 28th day of May, 1889.

STEPHEN J. ANDERSON.

Witnesses:

C. D. MOODY,

D. W. C. SANFORD.