

(No Model.)

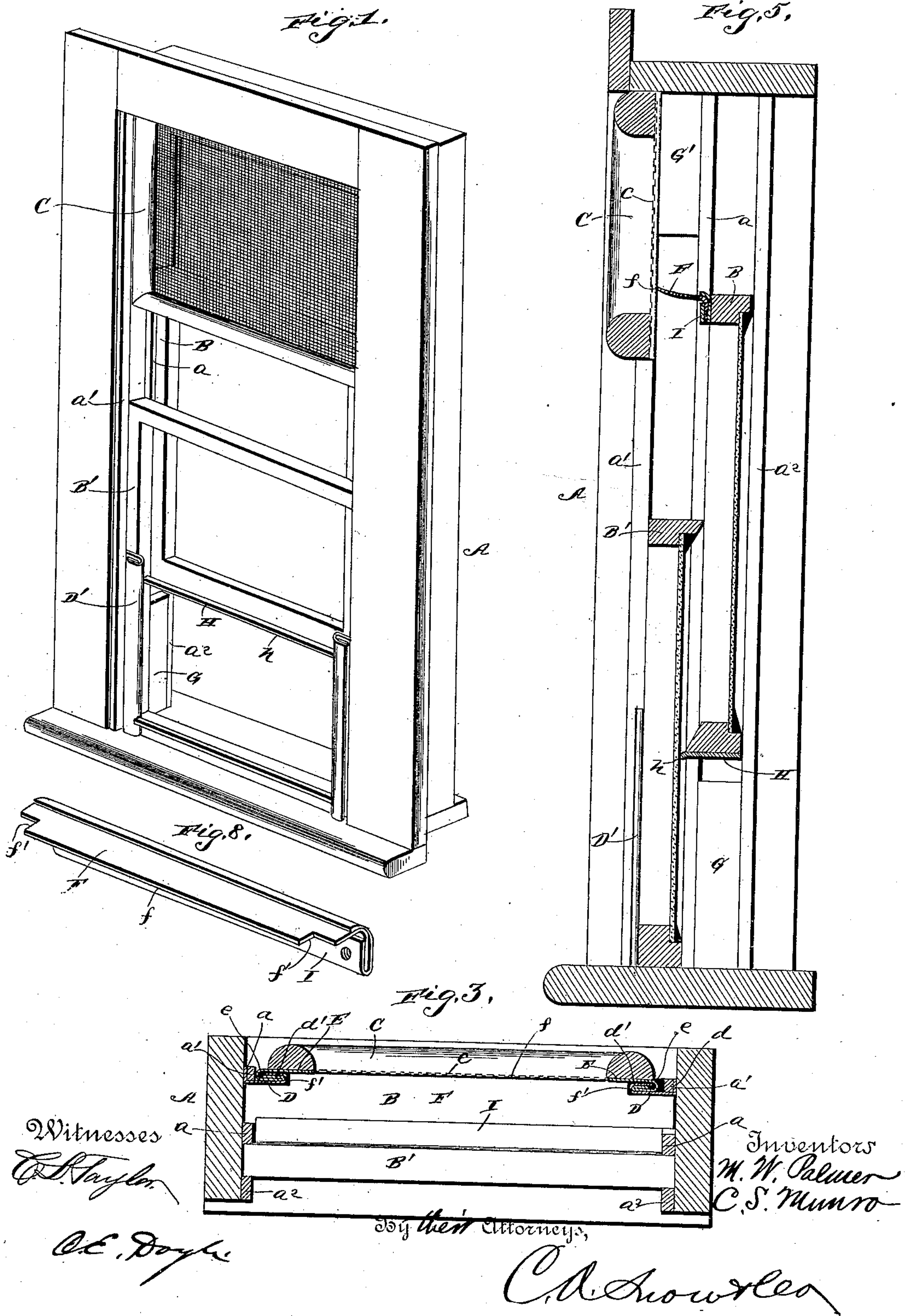
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M. W. PALMER & C. S. MUNRO.

WINDOW.

No. 375,564.

Patented Dec. 27, 1887.





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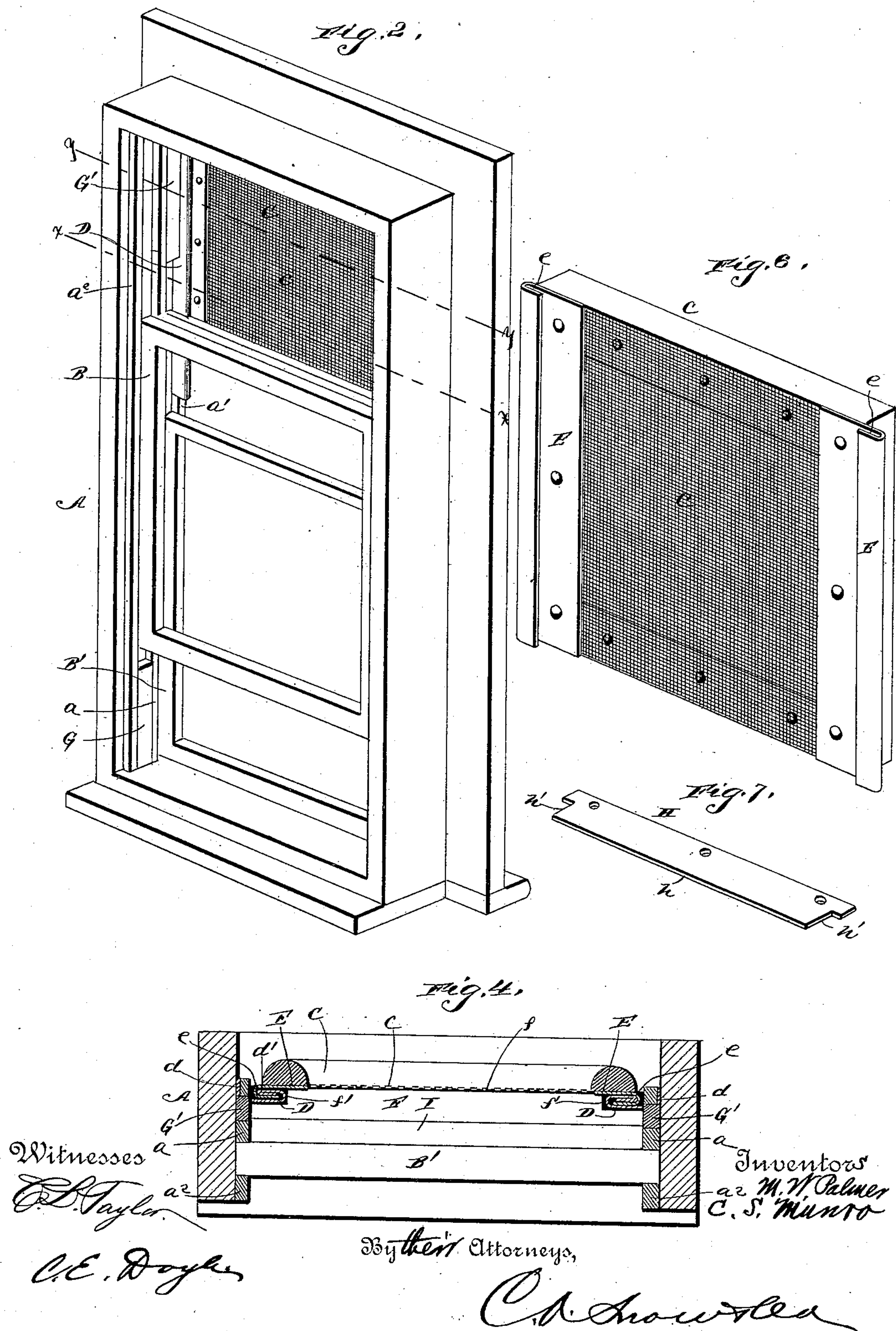
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# UNITED STATES PATENT OFFICE.

MERRITT WESLEY PALMER AND CHARLES SEIGLE MUNRO, OF KENESAW,  
NEBRASKA; SAID MUNRO ASSIGNOR TO SAID PALMER.

## WINDOW.

SPECIFICATION forming part of Letters Patent No. 375,564, dated December 27, 1887.

Application filed March 30, 1887. Serial No. 233,053. (No model.)

*To all whom it may concern:*

Be it known that we, MERRITT WESLEY PALMER and CHARLES SEIGLE MUNRO, citizens of the United States, residing at Kenesaw, in the county of Adams and State of Nebraska, have invented a new and useful Improvement in Windows, of which the following is a specification.

The invention relates to improvements in windows, the main object being to attach a removable screen to a window and render both the screen and window proof against the entrance of flies and other troublesome insects; and it consists, mainly, in the construction and arrangement of the screen and parts connected therewith or upon which the screen moves.

It consists, further, in certain details of construction and arrangement, hereinafter described, illustrated in the drawings, and pointed out in the claims hereto appended.

In the accompanying drawings, Figure 1 is a view of the inner side of a window frame and sashes, the screen occupying the upper part of the frame and the upper sash being lowered. Fig. 2 is a view of the outer side of the same, the parts being in the same relative positions as in Fig. 1. Fig. 3 is a transverse section on the line *xx* of Fig. 2. Fig. 4 is a transverse section on the line *yy* of the same. Fig. 5 is a central vertical section of the frame, sashes, and screen. Fig. 6 is a perspective view of the screen detached. Figs. 7 and 8 are detail views of the insect-guard strips.

Referring to the drawings by letter, A designates the frame, provided with the parting-strips *a* on its side rails, the beads or retaining-strips *a'*, secured to said side rails to keep the lower sash in place, and the inwardly-extending strips or outside bead, *a''*, for the upper sash.

B B' are respectively the upper and lower sashes, separated by the parting-strips *a* in the usual manner, and C is the screen-frame, filled in with the finely-meshed wire cloth or gauze *c*, as shown.

D D' are metallic guide plates or ways secured in pairs to the frame, respectively adjacent to its upper and lower ends. The pair D at their upper ends are each bent longitudinally, so as to consist of a flanged edge, *d*, and an opposite edge bent twice upon and parallel

to itself, so as to make a beaded and hooked way, *d'*, to engage the hooked edge *e* of one of the metallic plates E, secured to the edge of the screen-frame, so that by means of the guide-plates D and hooked plates E they may be slid up and down.

The construction of the pair of guide-plates D' at the lower part of the window is identical with that of the guide-plates D, and each is secured in place by securing the flanged edge *d* between the inner surface of the side rails of the frame and the retaining-strip *a'* on the corresponding side of the frame, with the opposite beaded and hooked edges projecting toward each other and turned inward in relation to the window.

F is a thick strip of flexible rubber, felt, or cloth, secured at one edge upon the top of the upper rail, with its free edge *f* projecting inward, so as to come in contact with the inner surface of the screen, the said strip being provided on said edge, near its ends, with the shoulders *f'*, to make close joints upon the plates D.

G G are stop-bars secured in the lower part of the guide-grooves of the upper sash and limiting the descent of the latter, so that the strip F cannot be drawn below the screen-frame. Thus the said strip, the screen, and the upper sash form a joint impervious to flies and similar insects.

G' G' are stop-bars similar to the bars G, but secured in the upper part of the guide-grooves of the lower sash, so that the lower part of said sash cannot be raised above the screen when the latter is engaged with the lower guide-plates, D', and the said lower sash moves in contact with the side of the screen, making a close joint therewith and preventing the entrance of flies.

H is a strip of material similar to the strip F, secured near one edge to the lower rail of the upper sash, with its free edge *h* projecting against the surface of the glass in the lower sash, and provided with notches or shoulders *h'* to give clearance to the side rails of the lower sash. This strip H prevents the entrance of flies between the sashes, so that joints of the windows and screen are alike impervious to flies and other similar insects.

The strip H is attached directly to the lower



5 rail of the upper sash; but the strip F is attached to the upper rail thereof by the plate I, which is secured to the side of said rail, while the strip is secured to its flange *i*, which stands inward therefrom.

Having described our invention, we claim—

10 1. The combination of the screen moving on ways or director-plates secured to the side rails of the window-frame near their upper ends, with the upper sash carrying the plate I and the strip of rubber or equivalent material secured to the said plate and having its free edge in contact with the surface of the screen, substantially as specified.

15 2. The combination of the lower sash, the upper sash, the screen, the strip of rubber or equivalent material secured to the bottom rail of the upper sash and having its free edge in contact with the glass on the lower sash, and the strip of rubber or equivalent material secured to the upper rail of the upper sash and having its free edge in contact with the screen, substantially as specified.

3. The combination, in a window, of the

frame provided with the parting-strips *a* and 25 the retaining pieces or beads *a' a'*, for the lower and upper sashes, respectively, the guide-plates D D', having their flanged edges secured between the side rails of the frame and the beads *a'*, and provided with the hooked inner 30 edges, *d'*, the screen, the hooked plates E, secured to the side rails of the screen-frame, the upper and lower sashes, B B', respectively, the stop-bars G G' for said sash, and the rubber strips F and H, secured, respectively, to 35 the top and bottom rails of the upper sash and provided with clearance shoulders or notches on their free edges, all constructed and arranged substantially as described, for the purposes specified. 40

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

MERRITT WESLEY PALMER.

CHARLES SEIGLE MUNRO.

Witnesses:

JAMES M. MILLER,

S. W. WILSON.