(No Model.)

J. WEST.

FLY SCREEN.

No. 511,980. Patented Jan. 2, 1894.

FIG. 1.

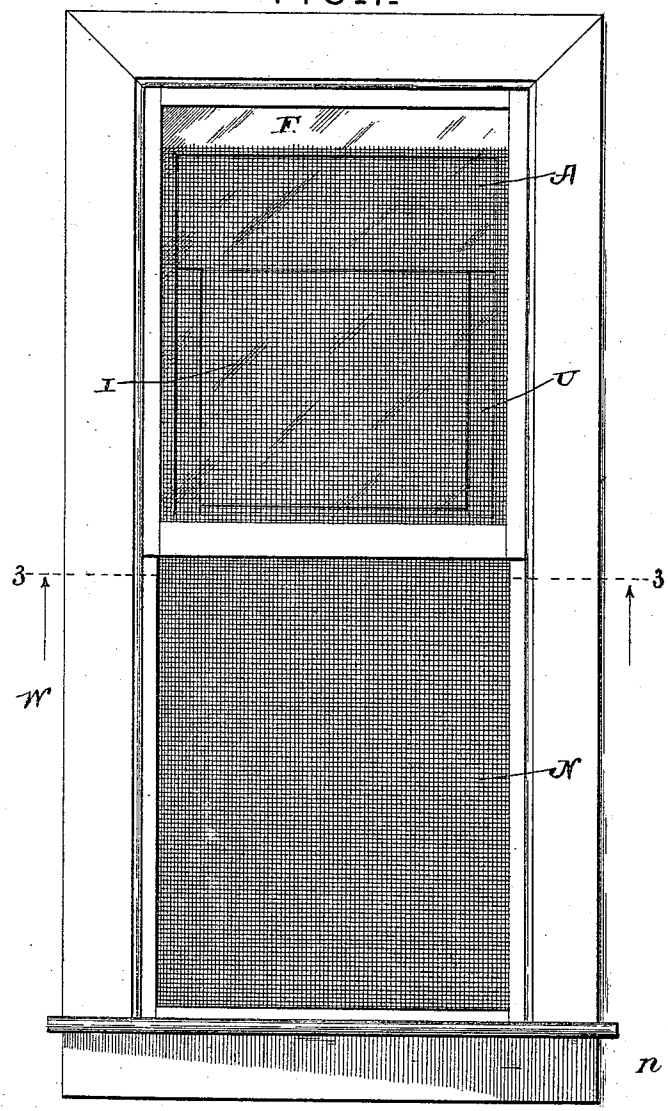


FIG. 2.

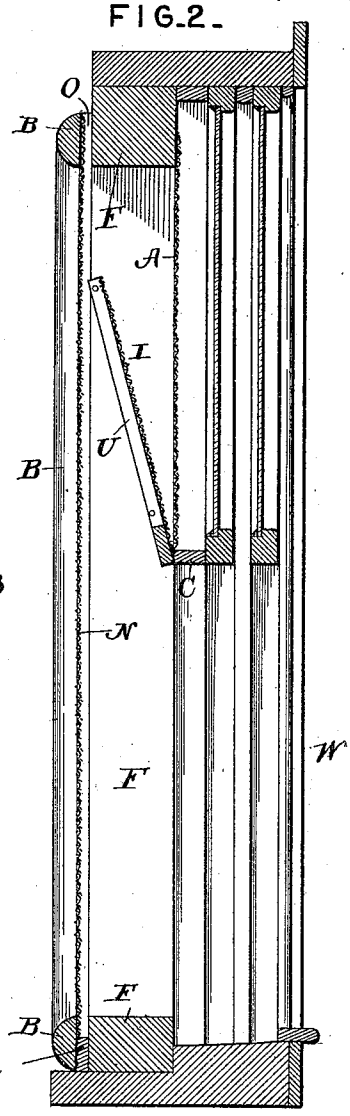
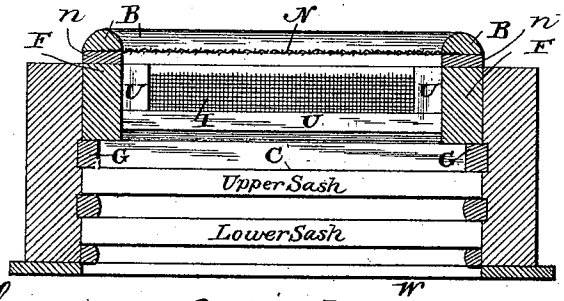


FIG. 3.



Witnesses

Jas. K. McCathran

N. J. Dollamer.

Inventor

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By his Attorneys,

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THE NATIONAL LITHOGRAPHING COMPANY,
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UNITED STATES PATENT OFFICE.

JOHN WEST, OF BRADDYVILLE, IOWA, ASSIGNOR OF ONE-HALF TO GEORGE W. REED AND EDWARD WEST, OF SAME PLACE.

FLY-SCREEN.

SPECIFICATION forming part of Letters Patent No. 511,980, dated January 2, 1894.

Application filed July 28, 1891. Serial No. 400,936. (No model.)

To all whom it may concern:

Be it known that I, JOHN WEST, a citizen of the United States, residing at Braddyville, in the county of Page and State of Iowa, have invented a new and useful Fly-Screen, of which the following is a specification.

This invention relates to fly screens, and more especially to screens of that character which permits flies to escape or pass out of a room but prevents their re-entrance.

To this end the invention consists in a screen constructed substantially as hereinafter more fully described, and as illustrated on the sheet of drawings, wherein—

Figure 1 is an elevation of a window viewed from the interior and with the lower sash raised, my improved screen being mounted in the window frame outside the sashes. Fig. 2 is a central vertical section of Fig. 1. Fig. 3 is a cross-section on the line 3—3 of Fig. 1 looking in the direction of the arrows.

Referring to the said drawings, the letter W designates a window as an entirety, and in the frame of this window outside the sashes may be removably located my improved screen which is of a construction described below; or, the frame of the screen may be hinged in the window frame or may be of the height of only one sash which is moved to allow it to be inserted, or such frame may be hinged in a door frame and be used as a screen door—all these uses to which the invention is applicable being well known with devices of this character.

The letter F designates a deep frame to whose outer side is secured the main netting N, preferably by nailing beading B over the edges thereof, the rails passing then through narrow strips *n* and into the frame but an opening O is left between the netting and the frame at the upper end of the latter by omitting the strip *n* at this point. Secured to the inner side of the frame is an auxiliary netting A extending from the upper end of the frame down to a cross-piece C which is secured across the frame.

U is a U-shaped framework secured in any suitable manner within the frame F, its lower end standing against the cross-piece C, its body inclining outwardly, its sides secured to the inner faces of the side-bars of the frame, and its upper ends standing about midway between the cross-piece C and the upper end of the frame; and secured to the three members of this framework is an inclined netting I which joins the auxiliary netting A at its lower end but which is not quite in contact with the main netting N at its upper end, where the raw edge of the wire netting projects upward.

In operation, the screen being suitably located in a window frame, door frame, or elsewhere, the flies and other insects attracted by the light fly toward the screen, into and through the frame F below the cross-piece C (especially if both sashes of a window be raised), crawl upwardly on the main netting N, and pass out the opening O. The flies on the outside, when there is sufficient light indoors to attract them, light on the netting N and seek an opening therethrough, but they will not crawl up over the bead B onto the dark opaque frame. If they did they might pass down through the opening O to the inside of the main netting N, but even then they would fly from this netting to the auxiliary netting A, and if they continued their downward passage would be caught in the deep angular pocket between the auxiliary and inclined nettings, whence if they should fly upward they would again pass out the opening O, inasmuch as the inclined wall of said pocket is in a direct line with said opening and would therefore not be able to gain entrance to the house or building to the annoyance and discomfiture of the inmates. But even if they did find the opening between the main netting N and the inclined netting I, the latter is raw at that edge and would impede their passage downward. Thus it will be seen that this improved screen serves an important and useful function. The cross-piece C projects some distance inwardly from the frame F, as seen in Fig. 3, and hence when this screen is inserted in a window frame from the outside and both sashes raised, this strip bears against the outside of the lower cross-bar of the upper sash. The ends of the strip or cross-piece are cut away so as to fit the outer guides G, and hence there is no passageway for the flies between the screen and the windows. However, this feature is pref-

erably omitted when the screen takes the place of only one sash or when it is used as a screen door.

What is claimed as new is—

A fly screen for window and similar openings, comprising a main frame, F, corresponding in shape and size with and fitting snugly in the casement of the window, a cross-bar, C, connecting and secured to the sides of said frame at or near their centers and adapted to terminate at its outer edge contiguous to the inner surface of the sash-frame, a netting, A, secured to the outer edge of the main frame and covering the portion thereof above the said cross-bar, the main netting, N, covering the entire frame and secured to the front edge thereof, an outlet, O, being provided between the upper edge of said main netting and the top bar of the frame, an upwardly and inwardly inclined U-shaped frame, U, having its sides secured to the facing surfaces of the sides of the main frame its cross bar arranged in contact with the cross-bar, C, and its side-arms terminating close to the plane of the main netting, and a screen secured to said U-shaped frame, in juxta-position at its lower edge to the netting A, and terminating in a broken or ragged edge contiguous to the main netting, whereby flies and other insects may travel upwardly upon the main netting but are prevented from traveling in the opposite direction by the inclined rough edge of the screen I, all constructed and arranged as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN WEST.

Witnesses:
D. L. MORSE,
C. A. GRAY.