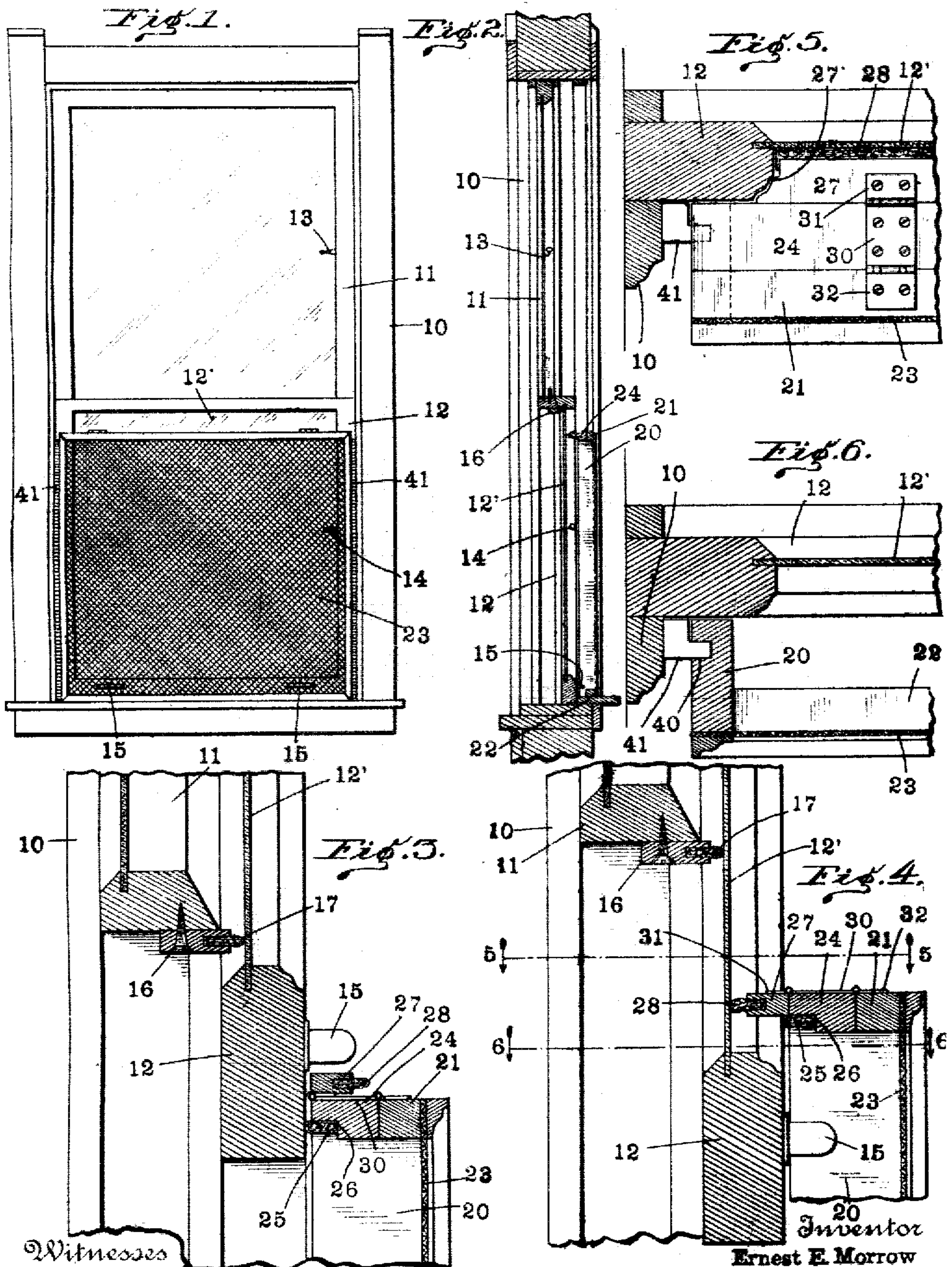


No. 811,733

PATENTED FEB. 6, 1906.

E. E. MORROW.
WINDOW SCREEN.

APPLICATION FILED JAN. 23, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

ERNEST E. MORROW, OF BLUFFTON, INDIANA.

WINDOW-SCREEN.

No. 811,733.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed January 23, 1905. Serial No. 242,236.

To all whom it may concern:

Be it known that I, ERNEST E. MORROW, a citizen of the United States, residing at Bluffton, in the county of Wells and State of Indiana, have invented certain new and useful Improvements in Window - Screens, of which the following is a specification.

The object of my invention is to produce a window-screen especially designed for use on the inside of a lower window-sash, the arrangement being such as to prevent insects from entering between the screen and the glass, but being such as to permit entire freedom of adjustment of the lower sash.

The accompanying drawings illustrate my invention.

Figure 1 is a front elevation of an ordinary window equipped with my invention; Fig. 2, a vertical section thereof; Fig. 3, an enlarged vertical sectional detail of the upper end of my improved screen and the adjacent sash portions when the lower sash is raised to its upper position; Fig. 4, a similar view with the lower sash partially lowered; Fig. 5, a section on line 5 5 of Fig. 4, and Fig. 6 a section on line 6 6 of Fig. 4.

In the drawings, 10 indicates the window-frame, 11 the upper sash, and 12 the lower sash, the upper sash being provided with a fastening-lock 13 and the lower sash being provided with a similar fastening-lock 14 and finger-pieces 15. The two sashes are mounted in any desired manner to slide vertically in the frame, and I find it desirable to secure to the lower edge of the upper sash a cross-piece 16, having a forward edge 17, of felt, which engages the outer face of the glass 12' of the sash 12, so as to prevent insects from creeping between the lower bar of the upper sash and the glass of the lower sash when the lower sash is raised.

My improved screen is a four-sided frame consisting of the two sides 20 20, the top cross-piece 21, and the bottom cross-piece 22, the cross-pieces being of less width than the side pieces for a purpose which will appear. The face of this frame is covered with any desirable netting 23.

As previously stated, the upper cross-bar 21 is of less width than the sides 20, the difference being sufficient to leave plenty of room for the passage of projecting hardware, such as the finger-pieces 15, which may be carried by the lower sash. Hinged to the inner edge of the cross-piece 21 is a flap 24, which fills the distance between the inner

edge of the cross-piece 21 and the inner edges of the sides 20, and said flap is preferably provided on its lower edge with a felt strip 25, adapted to engage the face of the lower sash. It is convenient to place the felt strip 25 in a rabbet 26, formed in the lower inner corner of the flap 24. Hinged to the upper inner corner of the flap 24 is a thinner supplemental flap 27, which carries at its inner edge a projecting felt strip 28, adapted to contact with the inner face of glass 12', the flap 27 being cut at its ends, as at 27', to fairly closely conform with the configuration of the adjacent sides of the sash 12.

Flap 24 may be hinged to the cross-bar 21 and flap 27 hinged to the flap 24 by any suitable form of hinge; but for convenience in manufacture I prefer to use a double hinge, such as that shown in the drawings, consisting of a central portion 30 of a length equal to the width of the flap 24 and having hinged to one end a butt 31 to be attached to the flap 27 and having hinged at its other end a butt 32, adapted to be secured to the cross-bar 21.

In operation when the sashes are in closed position, as shown in Figs. 1 and 2, the flaps 24 and 27 are extended so that the strip 28 of flap 27 lies against the glass 12'. When the sash 12 is raised and any projecting hardware, such as 14, moves upward, the flap 27 may be thrown back temporarily to permit its passage, and when the sash is raised to its upper limit, as shown in Fig. 3, the flap 24 is first swung back to permit the passage of the finger-piece 15 and then returned to the position shown in Fig. 3, so as to close the joint between the screen-frame and the bottom rail of the sash.

The side pieces 20 of the screen are provided with vertical grooves 40, adapted to receive vertical tracks 41, secured to the casing 10.

I claim as my invention—

1. A window-screen consisting of, a suitable frame and reticulated covering for said frame, a flap forming part of the upper cross-bar of said frame but hinged thereto, the inner edge of said flap being adapted to lie closely adjacent a portion of the window-sash, and a second flap hinged to the inner edge of the first-mentioned flap and having its inner edge projected into close proximity to the glass of the sash.

2. A window-screen consisting of, a suitable frame the upper cross-bar of which is

narrower than the sides to which it is attached, and a flap hinged to the inner edge of said cross - bar and having an inner edge adapted to lie in close proximity to portions
5 of the window-sash.

3. A window-screen consisting of a suitable frame and having an upper cross-bar of less width than the sides, a flap hinged to the inner edge of said cross-bar and extending
10 substantially to the width of the sides, said flap having a rabbet formed in its lower inner corner, a flexible strip laid in said rabbet, a

second flap of less thickness than the first flap hinged to the inner edge thereof, and a flexible strip carried by the inner edge of the
15 said second flap, all substantially as and for the purpose set forth:

In witness whereof I have hereunto set my hand and seal, at Bluffton, Indiana, this 20th day of January, A. D. 1905.

ERNEST E. MORROW. [L. s.]

Witnesses:

JAMES P. HALE,

GABRIEL T. MARKLEY.