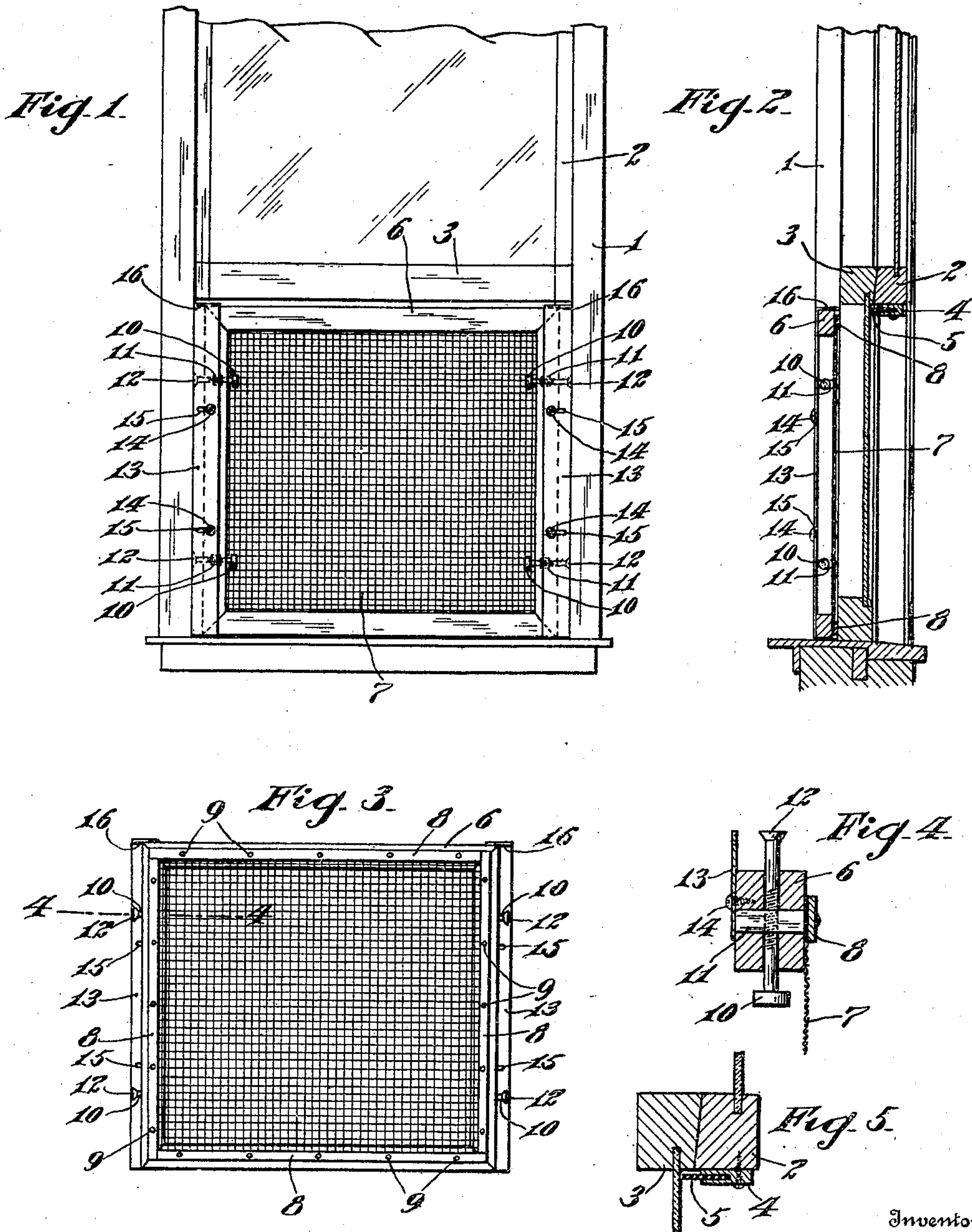


E. GRAUPNER.
WINDOW SCREEN.

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933,975.

Patented Sept. 14, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

ERNEST GRAUPNER, OF PHILADELPHIA, PENNSYLVANIA.

WINDOW-SCREEN.

933,975.

Specification of Letters Patent. Patented Sept. 14, 1909.

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To all whom it may concern:

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

My invention relates to an improved window screen, the object of the invention being to provide a screen which will absolutely prevent the entrance of insects when the screen is in position in the window, and which may be adjusted to fit various sizes of window frames.

With these and other objects in view, the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1, is a view in elevation illustrating my improvements. Fig. 2, is a view in vertical section of Fig. 1. Fig. 3, is a view in elevation of the outer face of the screen. Fig. 4, is a view in section on the line 4-4 of Fig. 3, and Fig. 5, is an enlarged vertical section through the meeting horizontal bars of the sashes.

1 represents an ordinary window frame, and 2 and 3 the upper and lower sashes respectively, mounted to slide in said frame. To absolutely prevent any entrance of flies or other insects between the sashes when the lower sash is raised, a strip 4 is secured to the lower face of the cross bar of the upper sash, and provided with a flexible apron 5 preferably of rubber or similar material, bearing against the glass of the lower sash, so as to prevent any entrance of insects walking up the outer face of the glass of the lower sash.

6 represents the rectangular frame of my improved screen, which may be made of wood or other material, and to the outer face of which the wire netting 7 is secured, and held by means of thin metal strips 8, perforated to receive screws or other fastening devices 9, and securely hold the netting against the frame and form a continuous smooth surface to bear against the inner sash and exclude insects, where said sash contacts with the screen. The vertical side bars of frame 6 are provided with openings to receive set screws 10, and nuts 11 are inserted

in openings in the bars, and extend across said openings, with the screw threaded openings in said nuts registering with the screw receiving openings in the bars, and said set screws engage in the threads in the nuts, and are provided at their outer ends with swiveled friction blocks 12 preferably of rubber, so that when the screws are forced outward, they will engage the window frame and securely hold the screen in the window.

To prevent any entrance of insects at the sides of the screens, I provide the screen with metal strips 13. These strips are of approximately the height of the screen, and are located against the inner face of the screen, and are held by screws 14 located in slots 15 in the strips 13, so as to hold the strips at the proper adjustment to close the space between the edge of the screen and the frame. The upper ends of these strips 13 are bent at right angles as shown at 16, to overlap the upper edge of the screen, and prevent the entrance of insects at this point.

It will thus be observed that the screen is capable of considerable adjustment to fit different widths of window frames, and will at any adjustment absolutely exclude insects.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the claims.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a window screen, the combination with a rectangular frame, netting secured to said frame, set screws mounted in the vertical bars of said frame, metal strips secured to the vertical bars of said frame and mounted to move laterally, means for clamping said strips at various lateral adjustments relative to the screen, and the upper ends of said strips bent across the upper edge of the screen frame, substantially as set forth.

2. In a window screen, the combination with a rectangular frame, a wire netting located against the outer face of said frame, metal strips secured to the outer face of the frame and overlapping the edges of the netting, set screws in the vertical members of said frame, adapted to engage a window frame and secure the screen in position,

strips adjustably mounted upon the vertical members of the frame, and adapted to close the space between said vertical members and window frame, and the upper ends of said strips bent across the upper edge of the screen frame.

3. The combination with a window frame, upper and lower sashes mounted to slide therein, of a screen, nuts inserted in the vertical side bars of said screen, set screws supported in said nuts and adapted to engage the window frame and secure the screen in place, strips adjustably secured to said vertical members of the screen and adapted to

close the space between said vertical members and the frame and the upper ends of said strips bent across the upper edge of the screen frame, a strip secured to the lower cross bar of the upper sash, and a flexible apron secured to said strip and engaging the glass of the lower sash.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ERNEST GRAUPNER.

Witnesses:

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