No. 627,513. Patented June 27, 1899.

D. W. LLOYD.

WINDOW SCREEN.

(Application filed June 25, 1898.)

(No Model.)

Fig. 1.

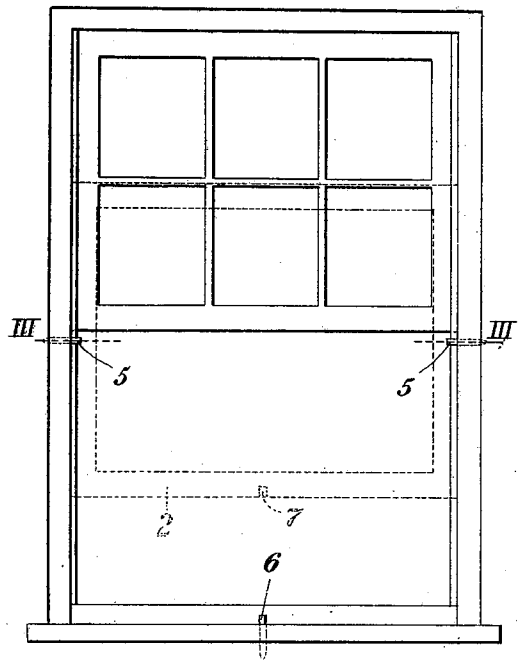


Fig. 2.

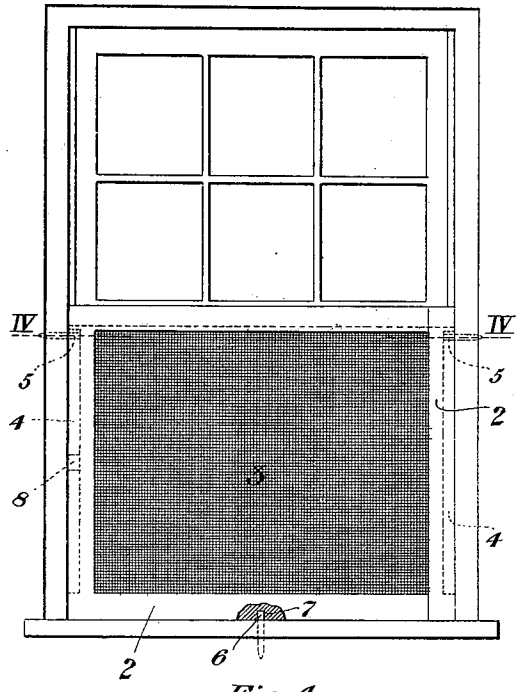


Fig. 3.

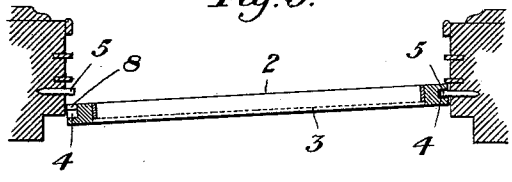


Fig. 4.

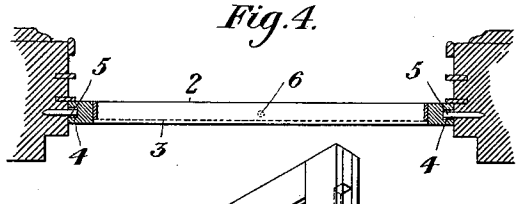


Fig. 5.

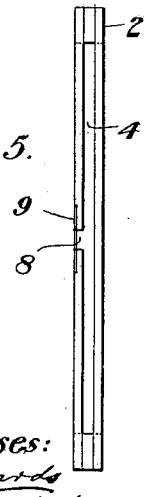
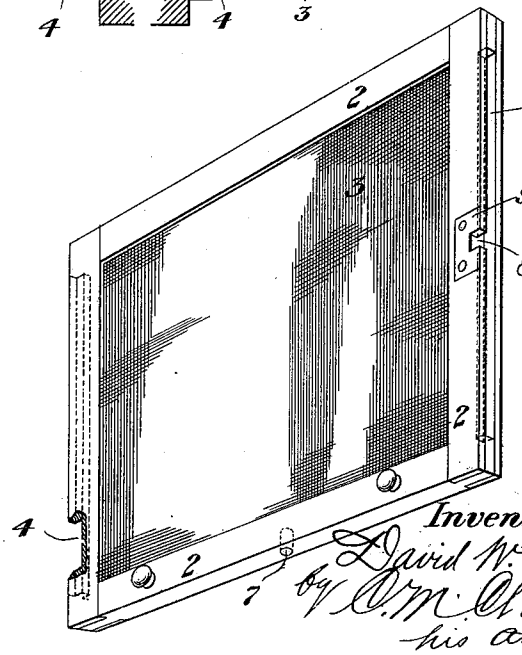


Fig. 6.



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UNITED STATES PATENT OFFICE.

DAVID W. LLOYD, OF PITTSBURG, PENNSYLVANIA.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 627,513, dated June 27, 1899.

Application filed June 25, 1898. Serial No. 684,524. (No model.)

To all whom it may concern:

Be it known that I, DAVID W. LLOYD, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered a new and useful Improvement in Window-Screens, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a face view of a window-frame fitted with retaining-pins in readiness for my improved screen. Fig. 2 is a similar view showing the screen in position. Fig. 3 is a cross-sectional view taken on the line III III of Fig. 1, illustrating the application of the screen. Fig. 4 is a cross-sectional view on line IV IV of Fig. 2, showing the screen in position. Fig. 5 is an edge view of the screen. Fig. 6 is a perspective view of the screen from the inside.

My invention consists of an improvement in window-screens, and relates to the means for securing the screen in position in a window-frame and for readily and quickly removing it therefrom.

2 is a rectangular frame, made of wood or metal, upon which is stretched the usual screen-cloth 3. The side members of the screen are provided with a central groove 4 at each outer side, extending to within a short distance of either end, and in the case of wooden frames, such as I have illustrated, the corner-joints are rabbeted together, so that the tenons of the top and bottom cross-bars extend out flush with the outer edges of the side bars and form the ends of the grooves.

For the purpose of retaining the screen-frame in position I employ two pins 5, one at each side, which are driven into the side frames in such a position as to engage the grooves 4 when the screen-frame is in place and at a point near the top of the grooves when the screen is in a lowered position, as in Fig. 2, so as to permit it to be raised. A third pin 6 is driven downwardly into the sill of the frame and enters a socket 7 in the lower cross-bar, thus rigidly engaging the frame at a third point and effectually preventing its dislodgment unless purposely raised.

At one side of the screen-frame one of the sides of the groove 4 is cut or notched out about midway of the height of the frame, as at 8, and the surrounding wood is preferably reinforced by a thin metal plate 9, secured to the main portion of the side bar by screws or pins.

In applying the screen to the window-frame the pins are first driven in at the proper position and the unnotched groove is applied to the pin at one side, as in Fig. 4, the opposite side being simply placed against the pin. The screen-frame is then gradually raised, a gentle pressure being exerted against the unengaged pin until the notch 8 comes into register with it, when it will pass through such notch and bear against the opposite inner side of the groove. The screen is then lowered to place, the bottom pin 8 engaging the socket 7 as the screen rests on the bottom, in which position it will remain until removed. The removal is accomplished by reversing the before-described operation and is very easily and quickly done by simply raising the screen gradually while exerting a slight pressure in the reverse direction, so as to cause the pin 5 to emerge through the notch 8, when the screen may be lifted away from engagement with the other pin and removed.

I am aware that screens have been made with side grooves adapted to engage pins or other guiding devices; but I believe I am the first to conceive a screen provided with side grooves having closed ends mounted on but two guiding-pins and using a third pin at the bottom to prevent dislodgment. The use of a single notch at one side of the groove is also new, and generally my invention possesses features of simplicity, cheapness, efficiency, and ease of operation that will commend it to the users of this class of goods.

It will be understood that changes and variations may be made in the proportions and design of the screen and that it may be made in metal or other material than wood without departing from my invention as expressed in the following claims.

I claim—

1. In a window-screen, the combination with oppositely-located single guiding-pins driven into the sides of a window-frame and a single upright pin driven into the sill, of a slidingly-mounted window-screen provided with edge grooves having closed ends, adapted to engage the guiding-pins, a notch in one of

the sides of one of the grooves, and a socket in the bottom of the frame adapted to engage the upright pin when the screen is in a lowered position, substantially as set forth.

2. In a window-screen, the combination with oppositely-located single guiding-pins driven into the sides of a window-frame and a single upright pin driven into the sill, of a slidingly-mounted window-screen provided with edge grooves having closed ends, adapted to engage the guiding-pins, a notch in one of the sides of one of the grooves, a reinforcing-socket surrounding the notch, and a socket in the bottom of the frame adapted to engage the upright pin when the screen is in a lowered position, substantially as set forth.

In testimony whereof I have hereunto set my hand.

DAVID W. LLOYD.

Witnesses:
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