(No Model.)

G. E. BLAINE.

WINDOW SCREEN.

No. 518,660. Patented Apr. 24, 1894.

Fig. 1.

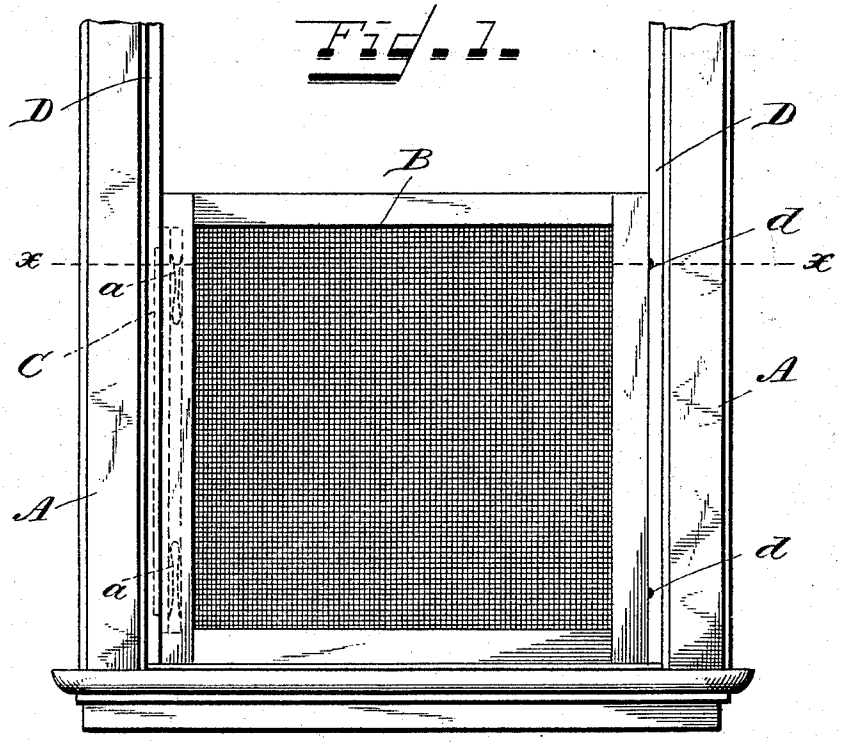


Fig. 2.

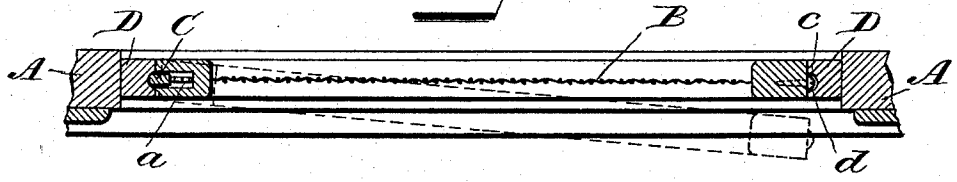
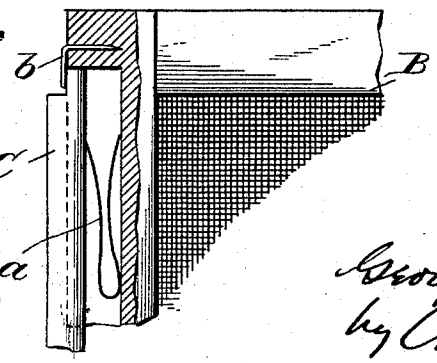


Fig. 3.



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GEORGE E. BLAINE, OF ALLIANCE, OHIO.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 518,660, dated April 24, 1894.

Application filed December 15, 1893. Serial No. 493,761. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. BLAINE, a citizen of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements 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.

My invention relates to that class of screens which slide vertically in the window frame, and it has for its object the improved construction of the same to cause them to bind snugly by friction alone, and retain any position to which they are adjusted and also to enable them to be readily taken out and replaced for cleaning and other purposes.

The novelty of my invention will be hereinafter set forth and specifically pointed out in the claim.

In the accompanying drawings: Figure 1 is a front elevation of the lower part of a window frame showing the application of my invention. Fig. 2 is an enlarged transverse plan view on the dotted line *x*—*x* of Fig. 1. Fig. 3 is an enlarged sectional view of one corner of the screen.

The same letters of reference are used to indicate identical parts in all the figures.

A represents a window frame of the usual or any suitable construction, and B the vertically sliding screen therefor. One of the side bars of the screen frame has a mortise cut in its outer side and extending nearly the entire length thereof. In this mortise are placed at each end two semi elliptic springs *a*, Figs. 1 and 3, bent back on themselves as shown, and then a friction strip C of wood, having cut away portions at its ends to form retaining shoulders, is pressed down into the mortise thereby putting the springs *a* under tension. Nails *b* are then driven into the ends of the side bar and are bent over to engage the shouldered portions of the strip C, as seen in Fig. 3, to hold the same in place in the mortise. The opposite side bar of the frame has on its outer side near each end a round headed screw *c* which is screwed into the wood with only the head projecting.

Removable ways D of the same width as the thickness of the screen frame are secured to the inner sides of the window frame and have their inner sides grooved to receive on one side the friction strip and on the other side the heads of the screws *c*, and on this latter side, openings are cut, as seen at *d*, Figs. 1 and 2, from the outside into the groove to permit the passage of the screw heads in putting in or taking out the screen. The manner of putting in and taking out the screen is illustrated in Fig. 2 by the dotted lines. To do this, it is only necessary to first insert the strip C in its groove and then, bringing the screw heads opposite the openings *d*, to press the strip C into its mortise and slip the screw heads through the openings *d* into the groove in the way D. The screen will then be held by the pressure of the springs forcing out the friction strip and it can be adjusted up or down as desired.

The purpose of the screws *c* is not only to hold the screen in place but by screwing them in or out the degree of friction desired can be regulated at will.

Having thus fully described my invention, I claim—

The combination, in a window screen, of a screen frame having one of its sides mortised nearly the entire length, a friction strip fitted in said mortise and provided with shoulders at each end, springs within said mortise normally pressing the friction strip outward, retaining clips overlapping the ends of said mortise and engaging the shouldered ends of said friction strip to hold the latter in the mortise, and adjustable projections on the opposite side of said screen frame, together with ways having vertical grooves which are engaged by said friction strip and adjustable projections on the screen frame, one of said ways being provided with transverse grooves to permit the ready insertion of the screen frame to its seat in the ways, substantially as described.

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