No. 610,385. Patented Sept. 6, 1898.

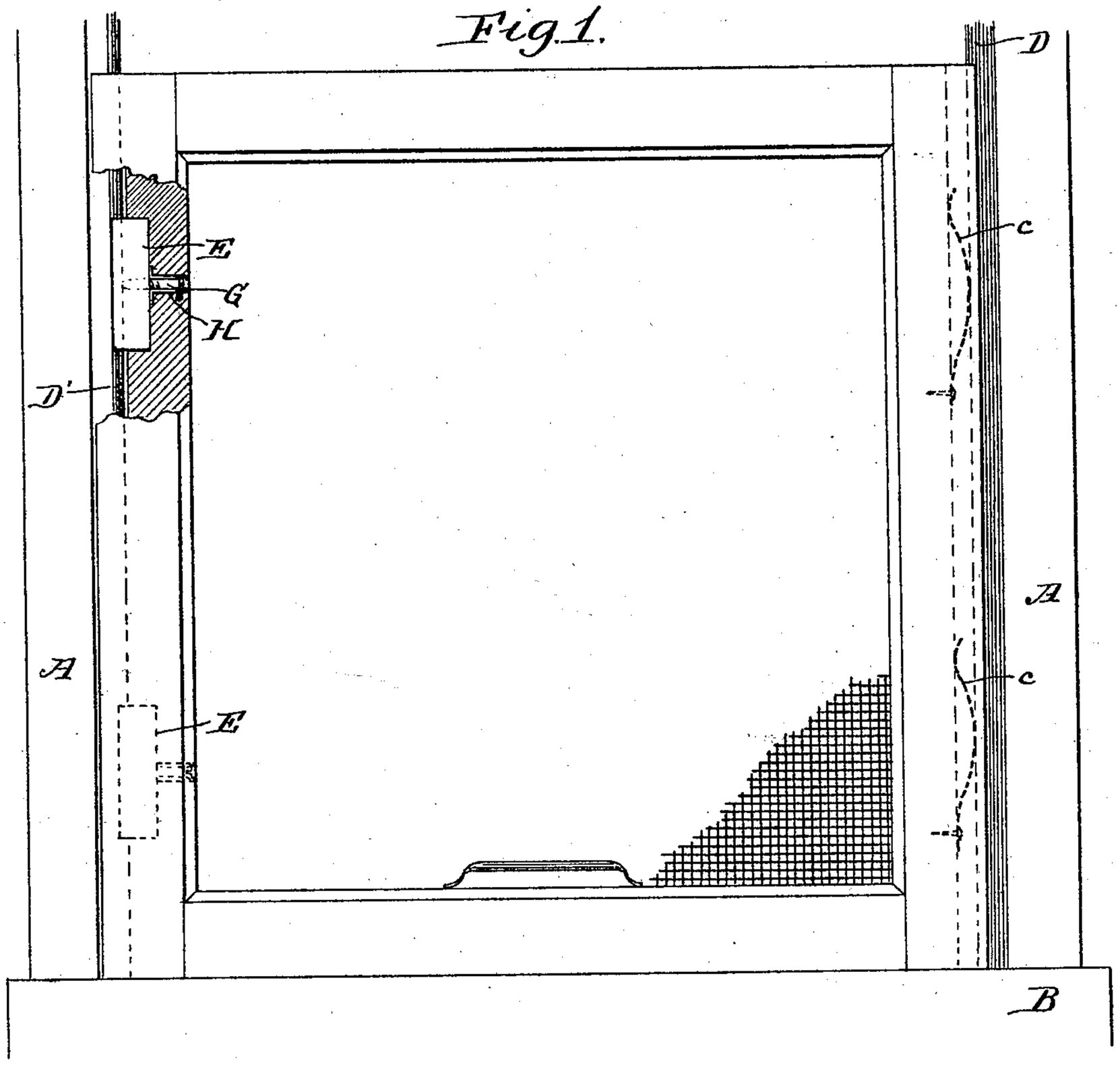
E. T. BURROWES.

WINDOW SCREEN.

(Application filed Dec. 28, 1897.)

(No Model.)

Fig. 1.



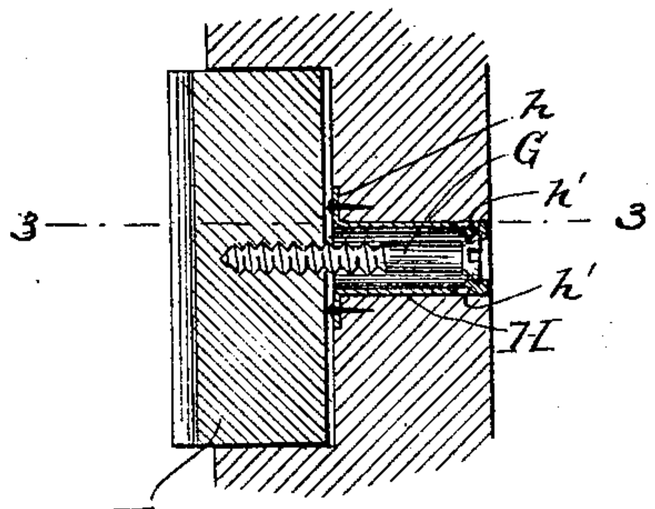


Fig. 2.

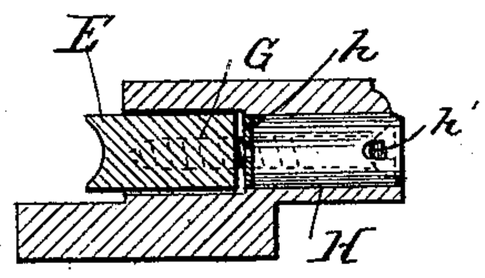


Fig. 3.

Witnesses,
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UNITED STATES PATENT OFFICE.

EDWARD T. BURROWES, OF PORTLAND, MAINE.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 610,385, dated September 6, 1898.

Application filed December 28, 1897. Serial No. 663,979. (No model.)

To all whom it may concern:

Be it known that I, EDWARD T. BURROWES, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Window-Screens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in window-screens, and more particularly to that class known as "sliding" screens.

In fitting and adjusting screens to window-frames it is frequently found that the latter are not perfectly square and more or less irregular, which necessitates planing or cutting down the edges of the screen-frame to secure the requisite fit. When the window-frame is not perfectly square, the rigid screen-frame will not lie sufficiently close to the jamb or sill at all points to exclude the insects. In view of this fact manufacturers usually construct the screens somewhat larger than is necessary, so as to allow for this after planing off for fitting. When a finished painted screen is planed off, the wood is left exposed to the elements and soon deteriorates unless repainted.

The object of the invention is to provide a structure which will avoid the necessity of cutting the frame or marring the paint when it is necessary to adjust or fit it to a window-frame and to also avoid the necessity of repainting or finishing the same.

The invention is embodied in the construction and arrangement of parts hereinafter described, and defined in the claims.

In the accompanying drawings, wherein like letters of reference designate corresponding parts in the several views, Figure 1 is an elevation of a portion of a window-frame, a screen being adjusted thereto, showing parts broken away. Fig. 2 is a detail section through a portion of the frame, showing a justifying-shoe; and Fig. 3 is a cross-section on the line 3 3 of Fig. 2.

In the drawings, A represents the jambs, B the sill, and C a screen of the type known as "edgewise-movable" screens, the same having spring-abutments *c* in its edge groove which normally rest against the bead or track D on the jamb. The opposite edge of the screen-frame has two recesses or pockets formed therein, in which are fitted the justifying shoes or blocks E near the upper and lower ends, respectively. These shoes are conveniently rectangular in form and closely fit within the recesses, so that they will be held from tilting, but can be moved outward when occasion demands. The outer edge of these blocks is fashioned to fit the bead or rail D′ and in this respect may be of any desired formation.

To adjust the shoes, I conveniently employ the screws G, which engage centrally-arranged threaded sockets formed in and extending from the inner edge of the shoe toward the outer edge. The screw-stem is passed into a perforation or slot formed in the frame-molding, its head approximating the inner edge of the molding, so that it can be readily reached with a screw-driver.

To hold the screw against longitudinal movement and permit its rotation, a metallic bushing H is secured in the aperture or slot, the screw passing therethrough. This bushing is formed with flanges *h* at its outer end, through which screws are passed for securing the bushing in place. The inner edge of the bushing is bent in over the edge of the head of the screw, serving thereby to prevent the inward movement of the screw.

Outward beyond but adjacent to the plane of the head of the screw suitable tongues *h′* are formed in the bushing, the same being bent inward beyond the edge of the screw-head. These tongues serve to hold the screws against outward movement, the head of the screw being secured between the tongues and flange.

By the construction it will be seen that by turning the screw the shoe will be forced out or in, the latter being held against rotation.

In operation when the window-frame is not square and the bottom of the screen-frame does not fit squarely against the sill it is only necessary to force one of the shoes out and, if the variation is considerable, then draw the other shoe in. The springs *c* permit the screen to be shifted. The shoes can also be employed to increase the pressure of the springs on the bead.

It is evident that minor changes can be

made in the construction and arrangement without departing from the nature and principle of the invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a screen, the combination with a frame having independent pockets formed in its edge, of justifying devices secured at the edge thereof, consisting of outwardly-movable shoes set into the pockets, and means for adjusting said shoes, substantially as described.

2. The combination with a screen-frame, of a justifying-shoe set into the edge thereof, a slot or perforation in the frame, a bushing in the slot, a screw having a threaded engagement with the shoe, and projections on the bushing engaging the head of the screw on opposite sides for preventing longitudinal movement thereof, substantially as described.

3. The combination with a frame, of independent justifying-shoes set into pockets formed in its edge, screws for adjusting the shoes, means for preventing longitudinal movement of the screws, and springs on the frame opposite the shoes, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD T. BURROWES.

Witnesses:
H. W. ROBINSON,
F. L. RICKER.