

No. 610,383.

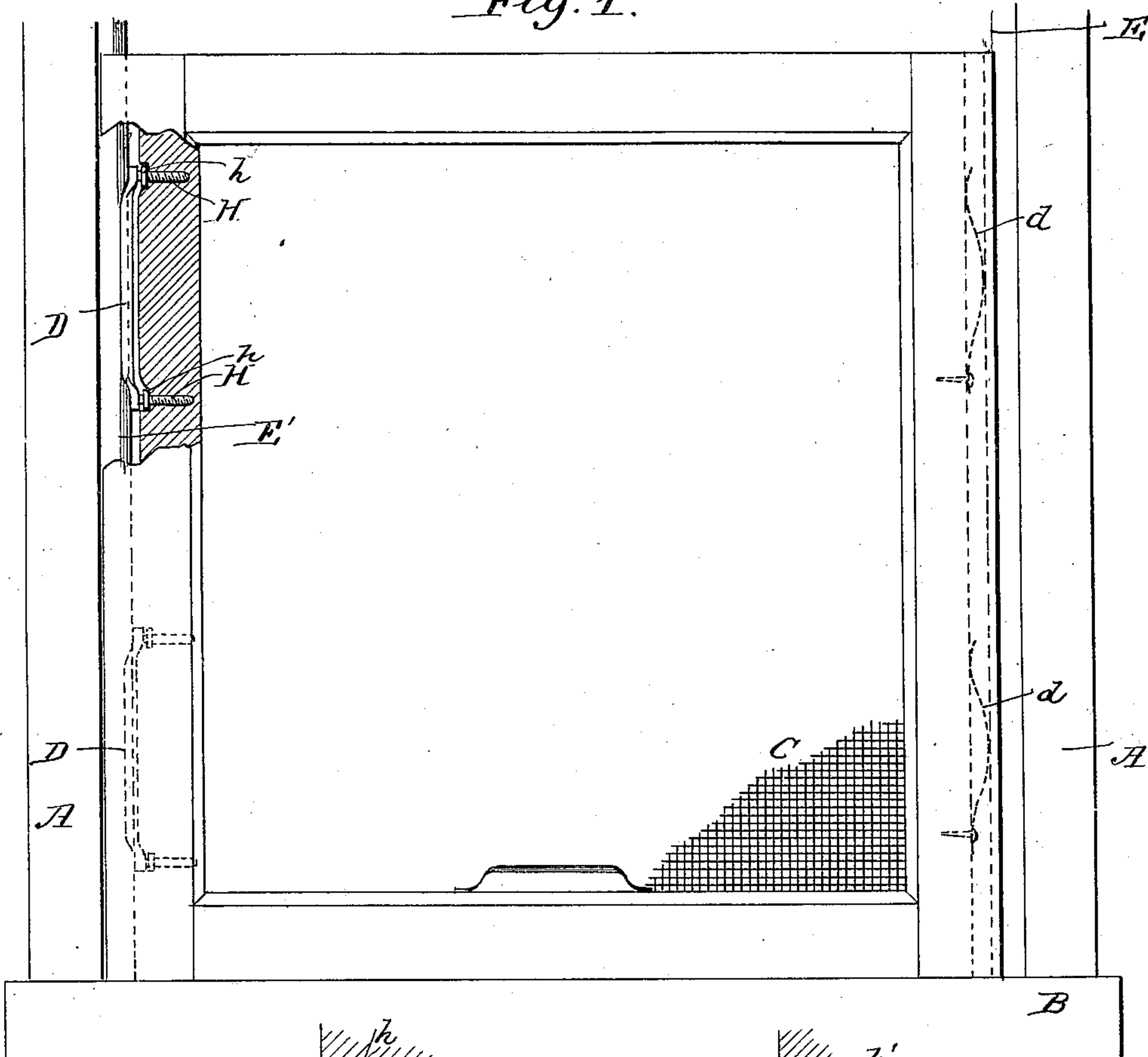
Patented Sept. 6, 1898.

E. T. BURROWES.  
WINDOW SCREEN.

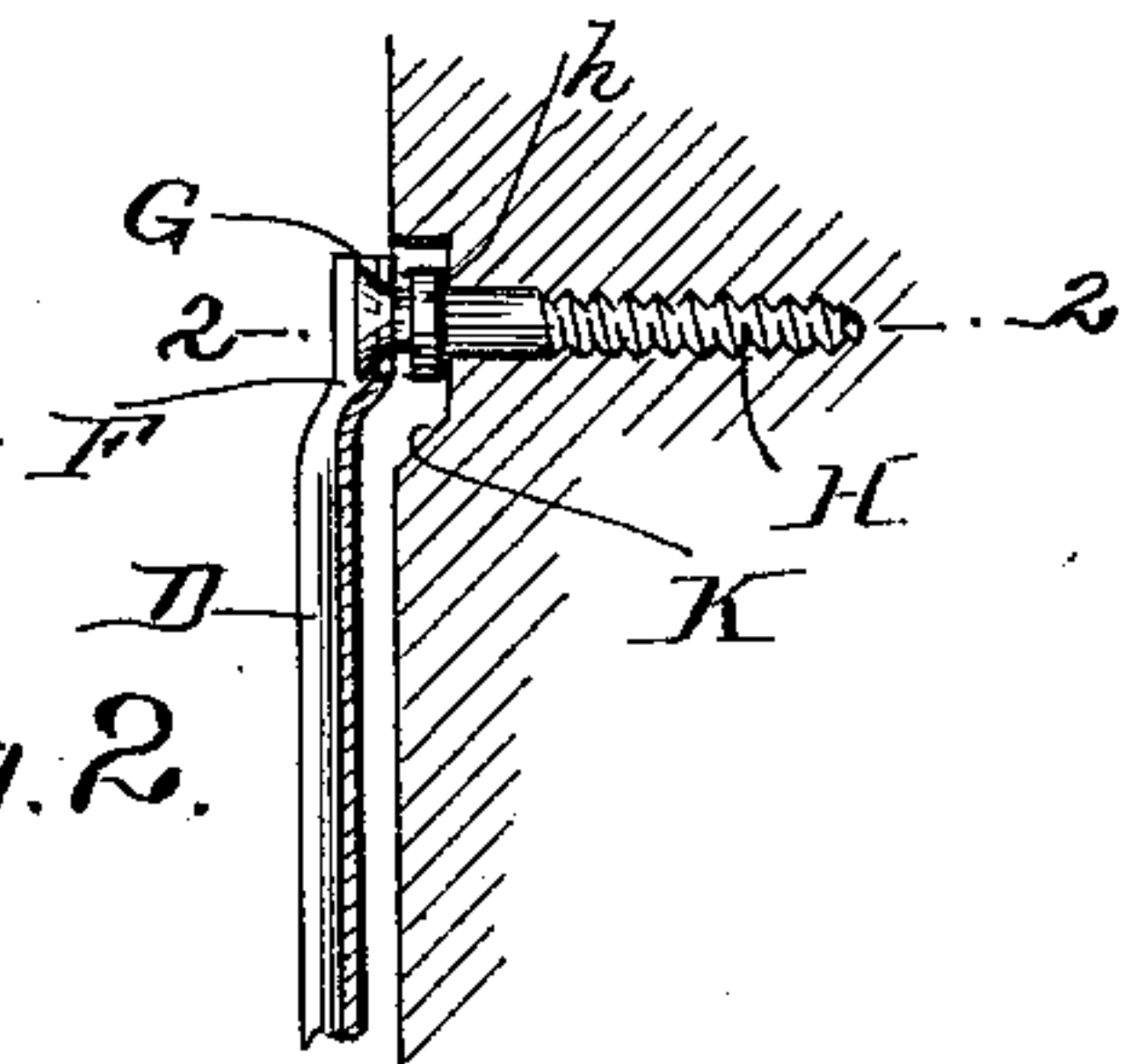
(Application filed Dec. 28, 1897.)

(No Model.)

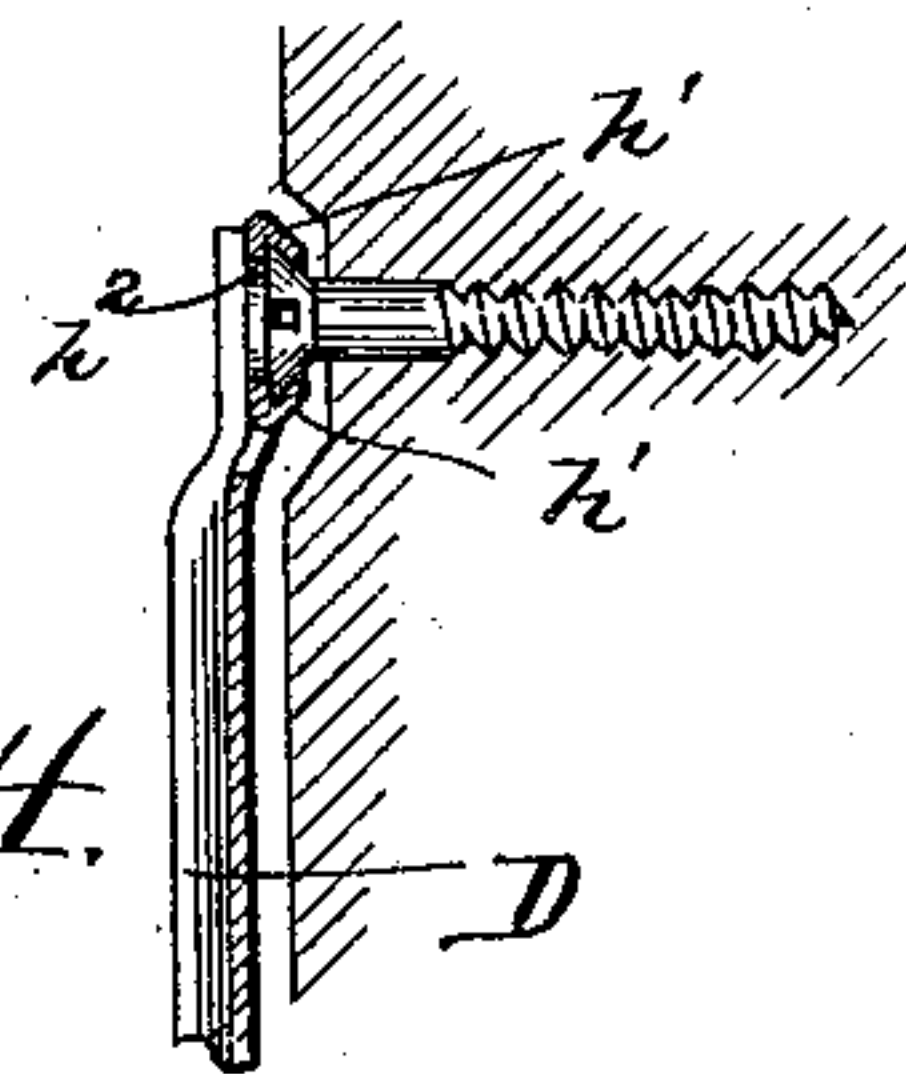
*Fig. 1.*



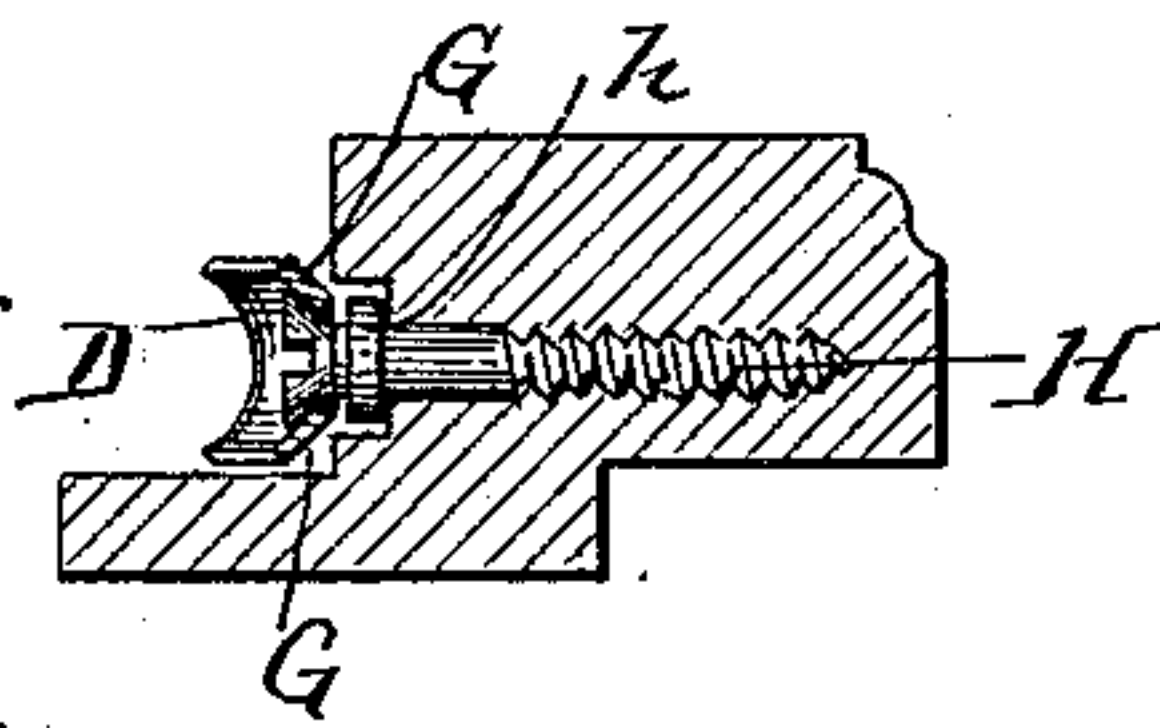
*Fig. 2.*



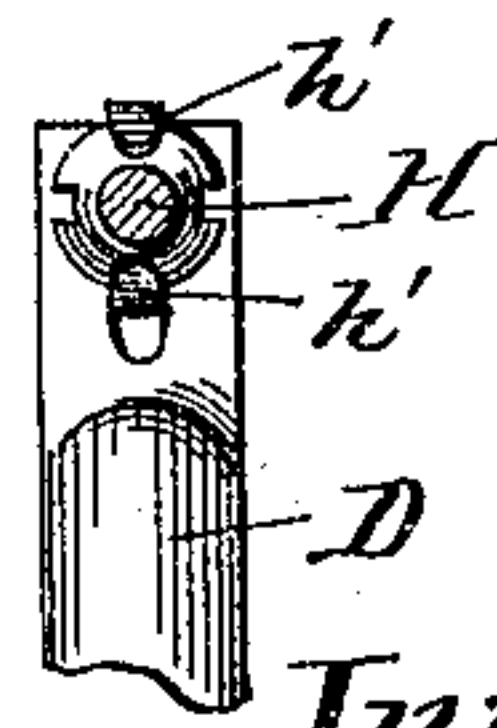
*Fig. 4.*



*Fig. 3.*

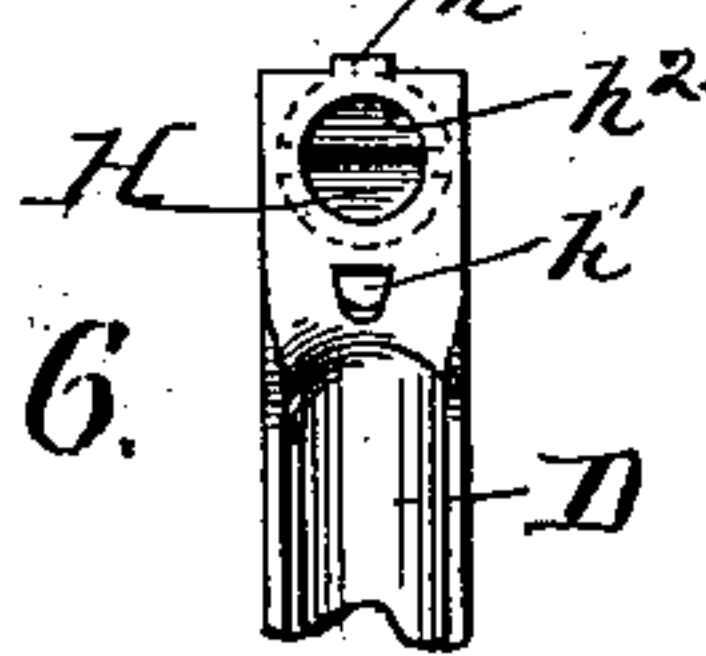


*Fig. 5.*



Witnesses,  
*John H. Milans*  
*Chas. W. Parker*

*Fig. 6.*



Inventor,  
*Edward T. Burrowes*  
By *A. S. Bacon*  
att.



# UNITED STATES PATENT OFFICE.

EDWARD T. BURROWES, OF PORTLAND, MAINE.

## WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 610,383, dated September 6, 1898.

Application filed December 28, 1897. Serial No. 663,977. (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 are 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 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 window frame and screen, showing a part of the latter broken away. Fig. 2 is a detail longitudinal section of a part of a shoe, showing the molding in section. Fig. 3 is a cross-section on the line 2 2, Fig. 2. Fig. 4 is a view similar to Fig. 2, of a modified form; and Figs. 5 and 6 are front and rear views of the end of the shoe shown in Fig. 4.

In the drawings is shown a sliding screen of that type known as "edgewise-movable" screens.

A designates the jambs, and B the sill, of the window-frame.

C designates the screen. On the edge of the screen-frame opposite the usual abutment-springs *d*, which normally rest against the track or guide E, are arranged the justifying-shoes D, which are formed of elongated concave strips designed to rest against the bead or track E' on the jamb. These strips have their ends bent down or offset, and their lower portions F are formed conveniently with bifurcations G, leading in from the ends.

H designates the adjusting-screws, the heads of which are exposed and located on the inwardly-bent end portions F of the shoes below the plane of the base of the concaved surface. The stems of the screws are passed into the bifurcations and loosely fit, so that the screws can be easily turned therein. Immediately below the shoes are the collars *h*, rigid on the screws, so that any outward movement of the screws independent of the shoes is prevented.

The ends of the shoes are located in recesses K, formed in the molding of the frame, while the screws are forced into the molding, as shown. As the adjusting-screws are arranged at each end of the shoe, it is evident that the shoe can be adjusted outward at an incline or parallel with the screen-frame, as occasion demands.

In Figs. 4, 5, and 6 is shown a slightly-modified form of connection between the shoe and the adjusting-screws. In this form the heads of the screws are secured loosely to the ends of the shoes by flanges *h'*, struck up from the metal of the shoe. The heads of the screws are placed below the shoe, and an opening *h*<sup>2</sup> is made in the latter directly above the screw-head and of a diameter less than the same, and the flanges are bent inward over the inner face of the screw-head.

With both forms the plates and screws are held from independent out-and-in movement.

In operation, should the window-frame be irregular or out of true, so much so that the bottom bar of the screen would not properly fit the sill, it is only necessary to move or adjust the justifying-shoes to compensate for the irregularity. The screws having exposed heads are forced in or out by the aid of an ordinary screw-driver. It will therefore be



seen that if the screen does not fit the window-frame it can be quickly made to do so by the justifiers in connection with the side springs, thereby avoiding the necessity of cutting or marring its edges.

I am aware that various changes in the construction shown can be made and substituted therefor without in the least departing from the nature and principle of the invention.

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

1. In a window-screen, the combination  
15 of the frame, of justifying-shoes at the edge and screws having exposed driving-heads loosely secured to the plates at opposite ends free to rotate, substantially as described.

2. In a window-screen, the combination

with the frame, of adjusting-shoes at the edge  
20 thereof consisting of elongated bead-engaging portions, and an adjusting-screw having an exposed head secured to the shoes and located inward beyond the plane of the bead-engaging surface of the shoe, substantially as described.  
25

3. An adjusting-shoe for window-screens consisting of an elongated bead-engaging portion and slotted ends, and adjusting-screws having exposed heads secured to the ends free  
30 to move, substantially as described.

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

EDWARD T. BURROWES.

Witnesses:

F. L. RICKER,

H. W. ROBINSON.