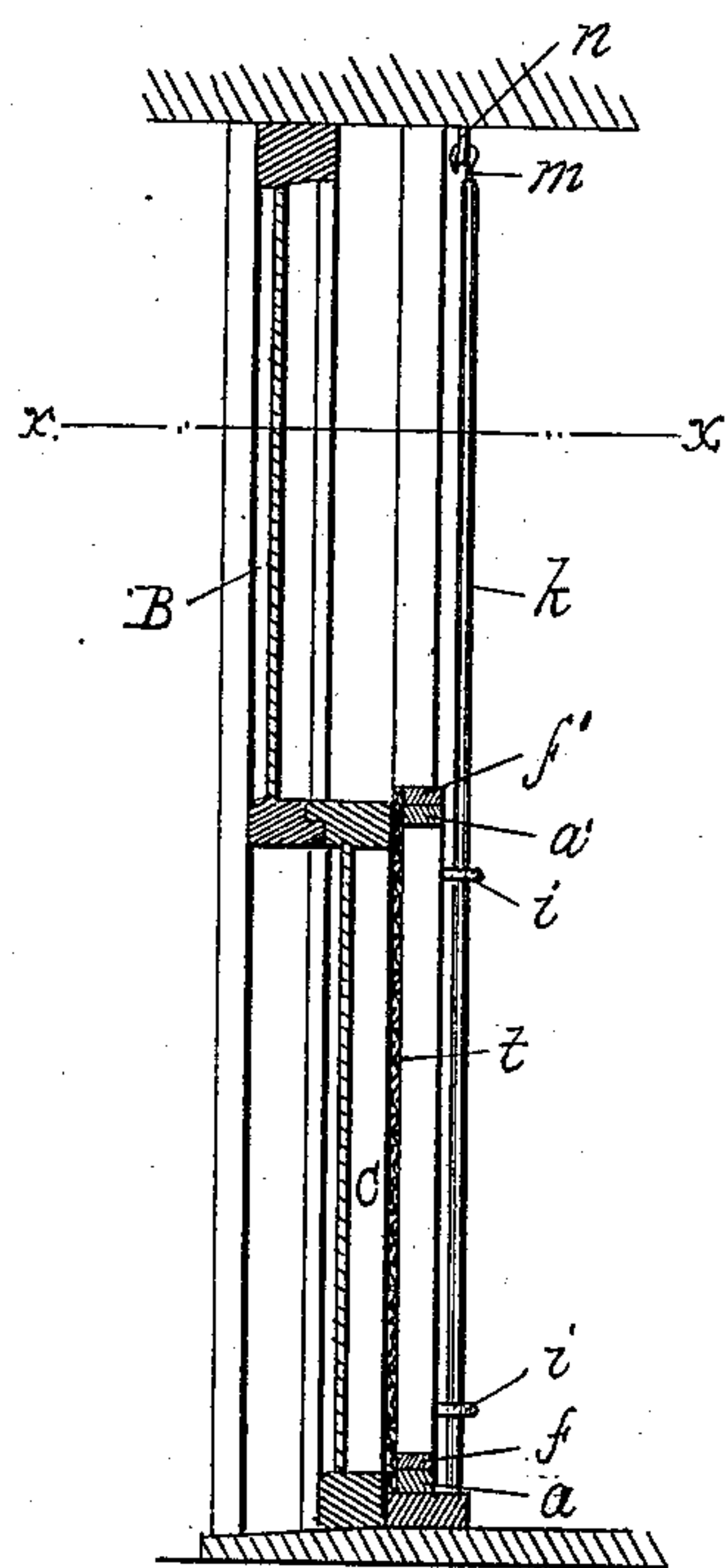
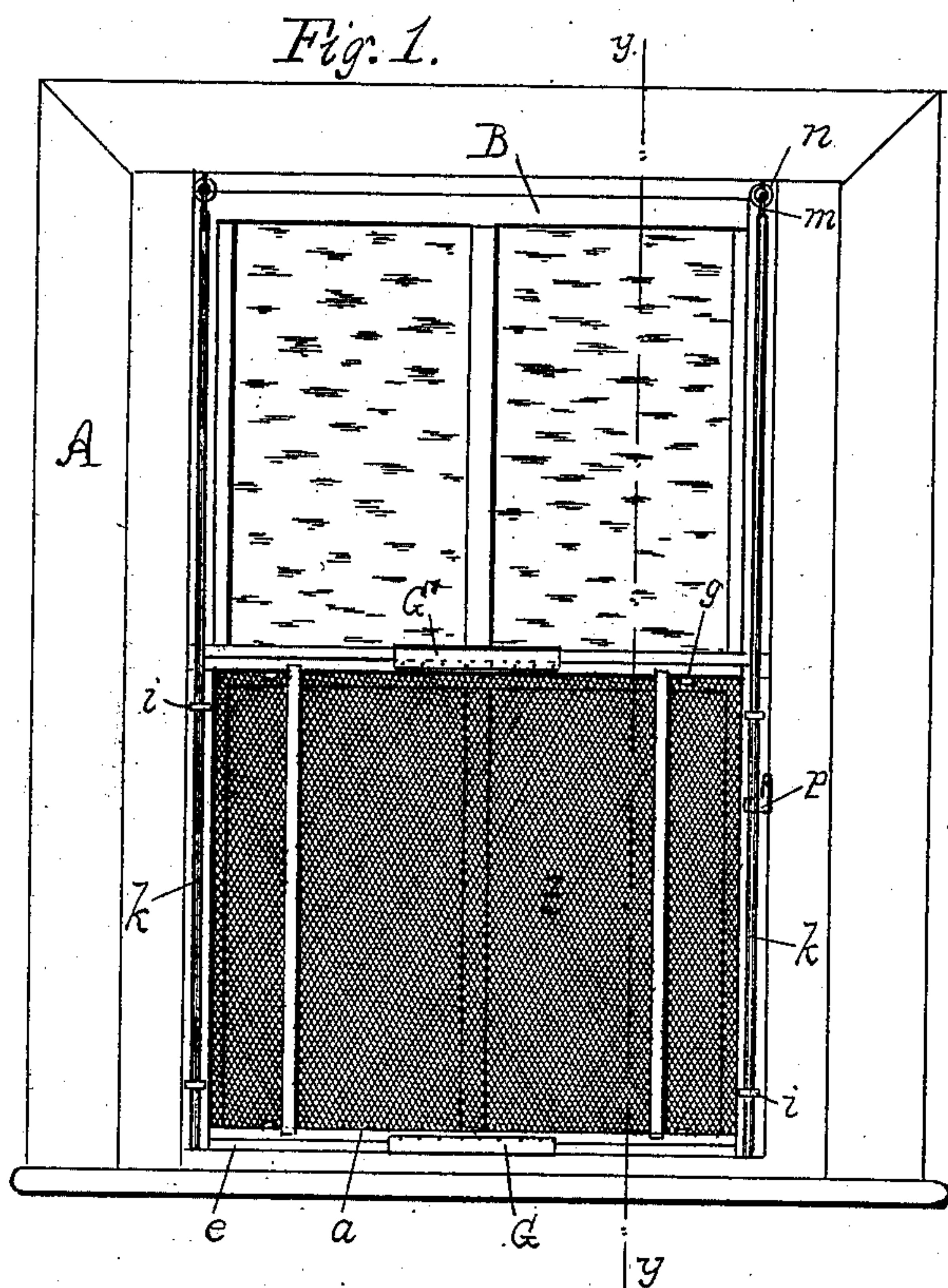


(No Model.)

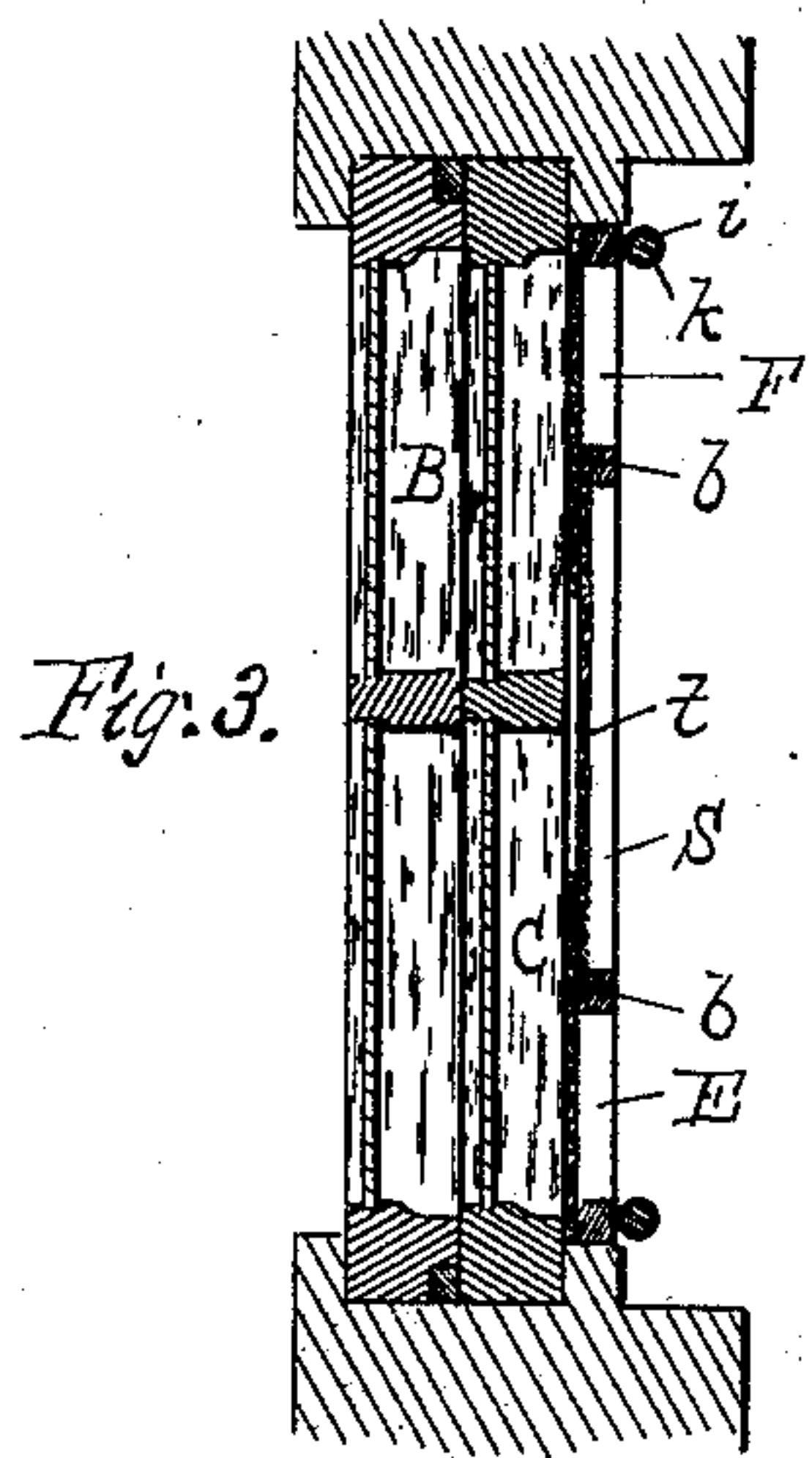
S. B. COMSTOCK.  
ADJUSTABLE SLIDING SCREEN.

No. 364,901.

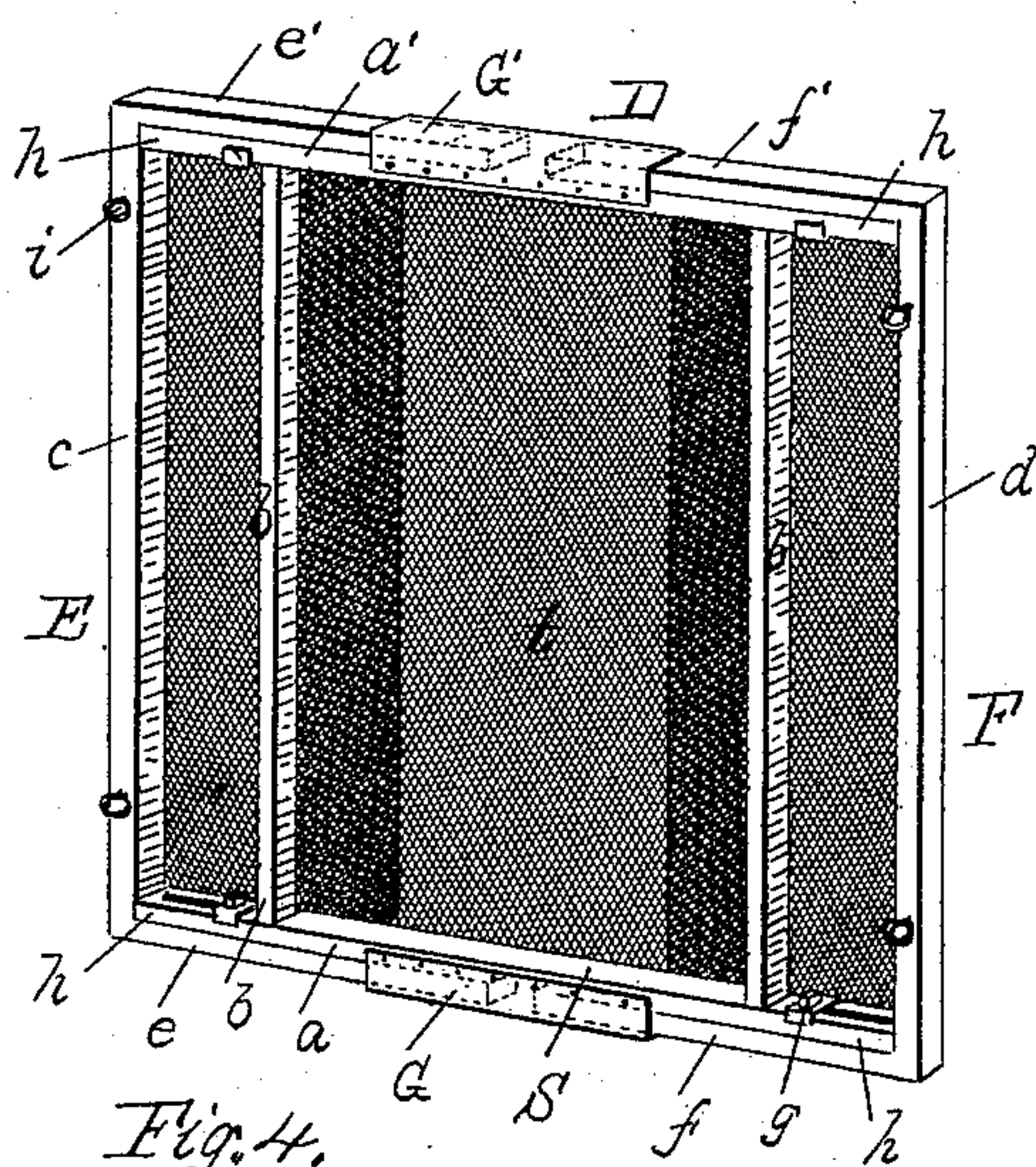
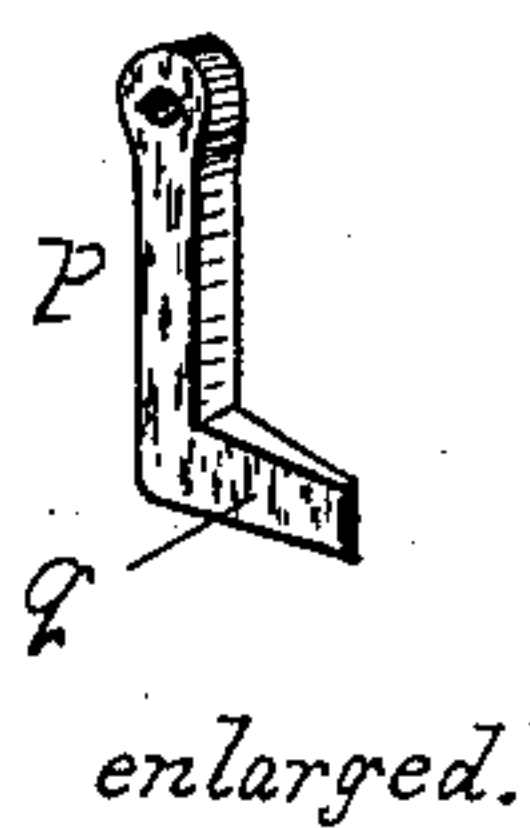
Patented June 14, 1887.



*Fig. 2.*



*Fig. 5.*



*Fig. 4.*

Witnesses.  
T. B. Thomas.  
H. C. Lodge.

Inventor.  
Sylvester B. Comstock.  
F. Curtis, atty.



# UNITED STATES PATENT OFFICE.

SYLVESTER B. COMSTOCK, OF PROVIDENCE, RHODE ISLAND.

## ADJUSTABLE SLIDING SCREEN.

SPECIFICATION forming part of Letters Patent No. 364,901, dated June 14, 1887.

Application filed July 14, 1886. Serial No. 208,006. (No model.)

*To all whom it may concern:*

Be it known that I, SYLVESTER B. COMSTOCK, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Adjustable Sliding 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to window-screens, especially that class which are adjustable, whereby the same screen may be employed in and fitted to windows of varying sizes, while it is so mounted as to be capable of being actuated in vertical paths of movement. This feature is particularly desirable in the event of its being necessary to close or open a blind, or when free access through the window for any cause is required.

My improvements relate to the manner of constructing the screen and in the position thereof with respect to the window frame and sash; furthermore, in the manner of mounting said screen upon pivotal supports which are readily removable. All these parts will be more particularly hereinafter described.

The drawings accompanying this specification represent, in Figure 1, a front elevation of a window provided with a window-screen embodying my improvements. Fig. 2 is a vertical transverse section on line *y y*, while Fig. 3 is a horizontal section on line *x x* in Fig. 2. Fig. 4 is a perspective view of the adjustable screen, and Fig. 5 is a view in detail of the screen catch or holder.

In the above drawings, A represents a window-frame provided with upper and lower sashes, B C, constructed in the manner now usually adopted.

D represents an adjustable window-screen composed of a screen, S, of fixed dimensions, made of the pieces or rectangular strips *a a' b b'*, preferably of wood for lightness. This screen upon its front side, or that adjacent to the sash, is covered with fine wire-cloth.

To provide for lateral adjustment to fit windows of varying sizes, I employ two extension or adjustable screens, E F, which are removably and adjustably secured upon the sides of the screen S. These movable screens are composed of the upright strips *c d* and the horizontal ones, *e e' f f'*. These parts are disposed vertically above and below the corresponding ones, *a a'*, which form in part the screen S, overlap the same and slide thereon when the screen D is to be made wider or narrower. Thus it will be readily seen that when the wire-cloth *t* is attached to the front side of the frame of the screen D a smooth surface is presented, since the strips *a a' e e' f f'* are all flush with each other, or upon the same plane. Hence when the screen D is placed in an active position with the wire-cloth resting against the inside face of the window-sash, it will be evident that the latter may be left in any desired position, partially open, without any possibility of admitting flies or other insects, which now frequently occurs. Two rectangular metal sleeves, G G', are furthermore secured upon the strips *a a'*, and permit of the introduction or withdrawal of the movable pieces *e e' f f'*, while the exterior dimensions of such sleeves G G' coincide with the extreme height of the screen D. After proper adjustment the latter is rendered temporarily a fixture by means of the clamping-bolts *g g*, which are secured to and move with the extension-screens E F in slots cut in the parts *h h*. The latter are continuations or extremities of the strips *a a'*, and are allowed to extend and lap upon the strips *e e' f f'*, in order to render the screen D, as an entirety, more firm and rigid and prevent its twisting or skewing when in an extended position.

In the event of contracting the screen, or to make its dimension in width less than that shown in Fig. 4, the ends *h h* of the pieces *a a'* are cut off, and in some instances it may become necessary to shorten the extremities of the pieces *e e' f f'*. On the other hand, to enlarge the said screen D, the bolts *g g* are loosened, the screens E F are pulled apart to the desired extent, when the bolts are again screwed down and the operation is completed.

To enable the screen D to be actuated in



vertical paths of movement, and to render the entire device readily removable and still efficient in operation, I have secured upon the rear face of the uprights *c d* guide-rings *i i*, which loosely engage two vertically-disposed guide-rods, *k k*. These latter are provided with hooks *m m* at their upper extremities, and are adapted to engage with eyebolts *n n* in the upper part of the window-frame. Thus they are readily detachable, since their lower ends are free and rest upon the window-sill.

Very frequently window-frames are sprung, and in the event of the screen sliding closely thereon much difficulty occurs in moving the screen when it is desired; hence I have secured the guide-rods pivotally at the top, and when the screen is to be actuated up or down it is swung out and back until free from the window-frame, and when it is raised the desired extent then it is swung back and held there by close contact with the window-frame, or by means of a clamp, *p*, which is pivoted to the window-screen, and is provided with a wedge-shaped lip, *q*, (see Fig. 5,) adapted to enter between the screen and the guide-rods *k k*.

The special feature in this adjustable screen is providing an even surface of wire cloth or netting, which shall rest against the inside of the window-sash, while the height of the screen shall be at least equal to the height of either of said sashes; hence it is immaterial in what position the window is left, no space exists between the sash and the wire-netting. Thus the entrance of flies and other insects is effectually prevented. Furthermore, in the manner of operating the screen no injury occurs to the window-frames, which in some instances is a very serious objection, while by making the pivotal guide-rods *k k* removable they can readily be disengaged from the eye-rings *n n*, and the entire device easily and quickly removed, and without leaving screw-holes or other marks of injury in the wood-work.

Presuming a window-screen of the con-

struction above described is to be attached to and mounted in a window-frame, it first must be adjusted thereto by releasing the set-screws *g g*, moving the extension-screens *E F* until they contact closely with the sides of the window-frame, when they are fixed in position by said set-screws. The guide-rods *k k* are now engaged with the screw-eyes *n n*, previously affixed in the frame, and the screen is then mounted on them by inserting the lower ends of said rods through the guide-rings *i i*, said rods being swung out away from the sash in this operation.

I am aware that it is not broadly new to attach a window-screen to vertical rods by means of rings or eyes which allow said screen to be moved up and down thereon, said rods being attached by eyes to the window-frame.

I am also aware that it is not broadly new to provide a window-screen with sliding end-frames and overlapping sleeves or plates, in order that it may be extended endwise at will. This, also, I do not broadly claim.

I am well aware that adjustable screens have been made; also, that sliding window-screens are in use; but

What I believe is novel and desire to claim is—

1. The combination of the horizontal longitudinally-slotted bars *h* and their adjusting-bolts with the wire-cloth *t*, the vertical strips *b c d*, the horizontal strip *a a' e e' f f'*, and the sleeves *D G*, substantially as set forth.

2. A window-screen having eyes *i*, in combination with rods *k*, having hooks *m* at their upper ends, and eyes *n*, with which said hooks detachably engage, for the purpose set forth.

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

SYLVESTER B. COMSTOCK.

Witnesses:

F. CURTIS,

H. E. LODGE.