

(No Model.)

E. COOK.
WINDOW SCREEN.

No. 594,606.

Patented Nov. 30, 1897.

Fig. 1

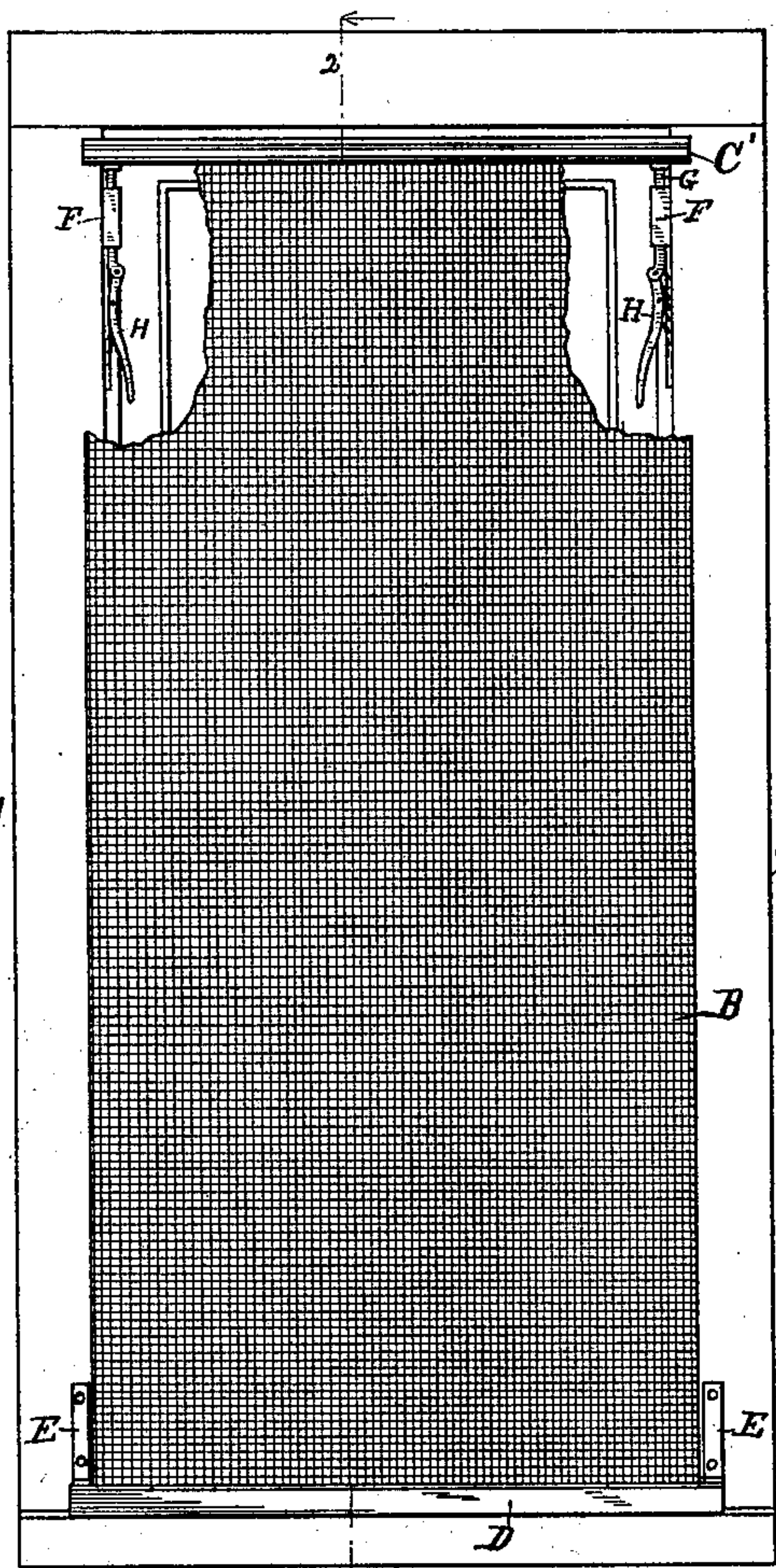


Fig. 2

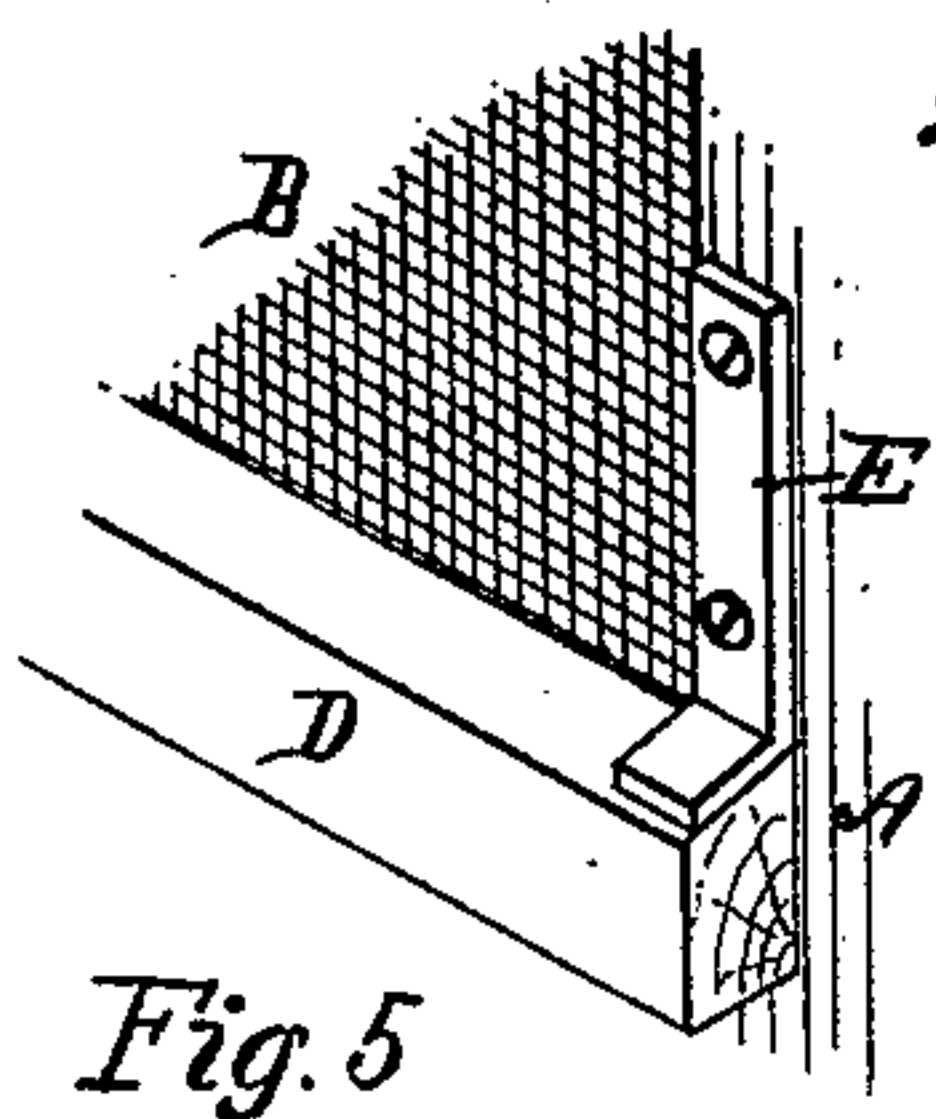
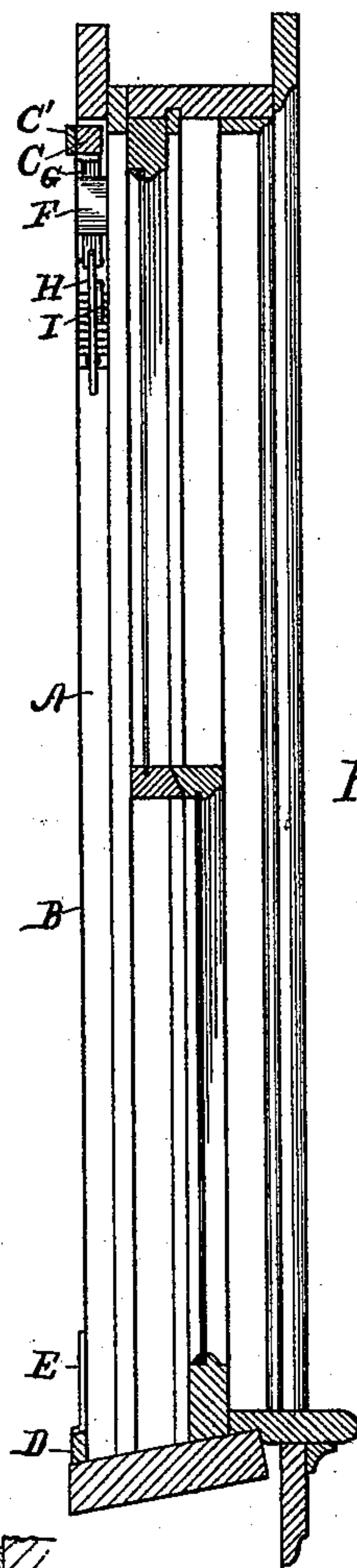


Fig. 3

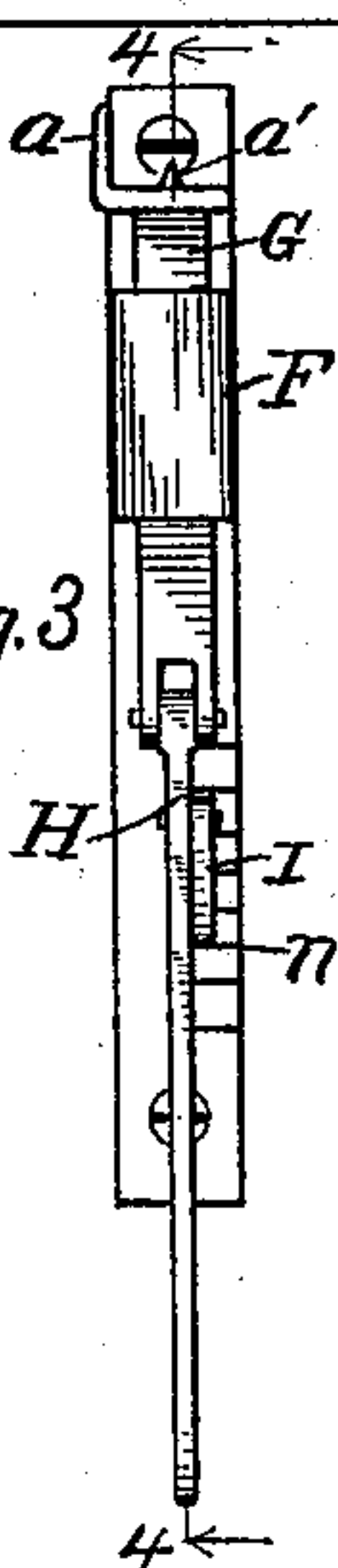
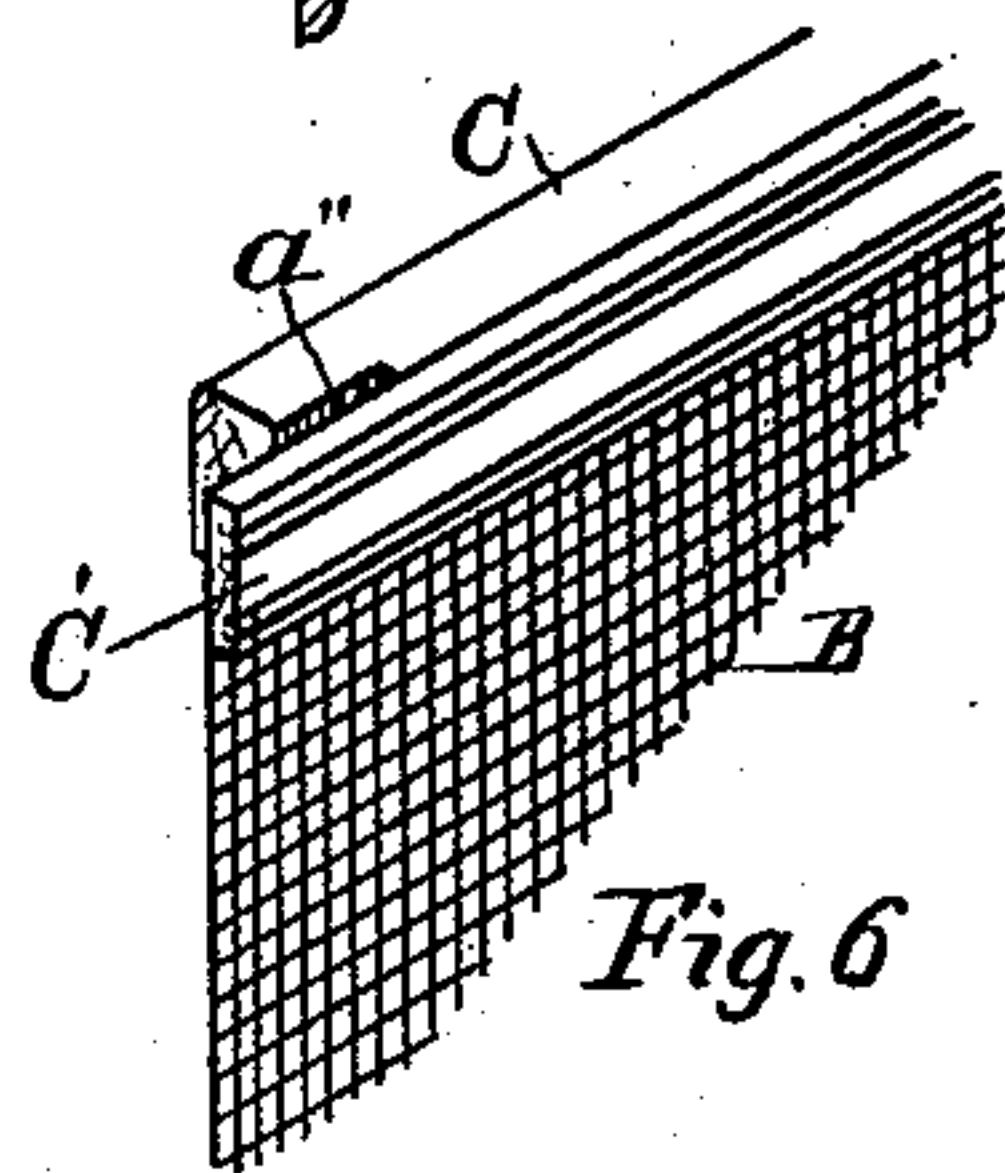
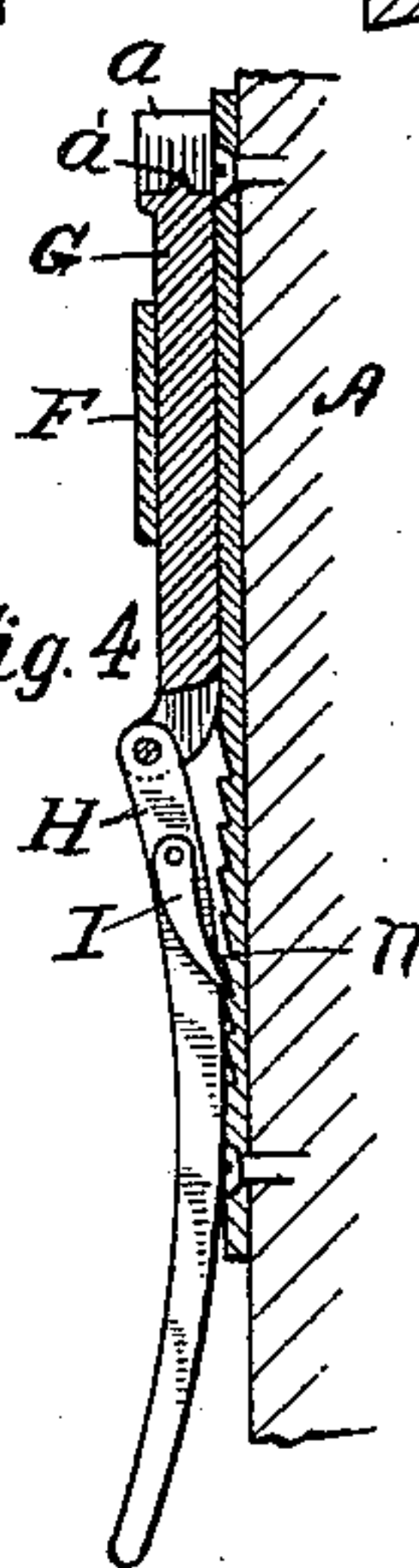


Fig. 4



Witnesses:
Walter S. Wood
Vernon C. Chappell

Inventor,
Eugene Cook
By Fred L. Chappell
Att'y.

UNITED STATES PATENT OFFICE.

EUGENE COOK, OF NILES, MICHIGAN.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 594,606, dated November 30, 1897.

Application filed March 5, 1896. Serial No. 581,890. (No model.)

To all whom it may concern:

Be it known that I, EUGENE COOK, a citizen of the United States, residing at the city of Niles, in the county of Berrien and State of Michigan, have invented a certain new and useful Improvement in Window-Screens, of which the following is a specification.

My invention relates to improvements in window-screens.

10 The objects of my invention are, first, to provide a window-screen which can be quickly and conveniently attached to the window casing or frame without the use of frames or other cumbersome means; second, to provide
15 a window-screen for the entire window which can be easily placed on the outside window-casing from the inside of the window; third, to provide an improved window-screen so constructed that the frame can be dispensed
20 with and cross-bars substituted at the top or bottom and the screen drawn tight between them. Other objects will appear more definitely in the detailed description. I accomplish these objects of my invention by the
25 devices and means described in the following specification and illustrated in the accompanying drawings, in which—

30 Figure 1 is an outside view of a window with one of my improved screens in position, portions of the screen being broken away to show the character of the adjusting devices. Fig. 2 is a vertical sectional view on line 2 2 of Fig. 1, looking in the direction of the little arrows at the end of the section-
35 lines. Fig. 3 is an enlarged detail elevation of one of the tension devices. Fig. 4 is a sectional view on line 4 4 of Fig. 3, looking in the direction of the little arrows at the ends of the section-line. Fig. 5 is an enlarged detail
40 view of one of the lower corners of the screen, as shown. Fig. 6 is an enlarged detail view of one of the upper corners of the screen, as shown.

45 Similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, A represents the window-casing, which can be either an outside or an inside window-casing.

50 B represents the screen held in place. The cross-bar D is secured by suitable means to the lower end of the screen and is held se-

curely in place against the bottom of the window casing or frame by the brackets E E, which extend outwardly and slightly down- 55 ward to engage the bottom bar D securely, as indicated in Figs. 2 and 5. A bar C extends across the top of the screen and fits within the window casing or frame. A molding or straight strip C' is secured to the out- 60 side of this cross-piece C and affords an attachment for the screen beyond the inner edges of the window-casing. A notch *a''* is cut or mortised into the top bar C, between it and the molding C'. To each side of the 65 window-casing at the top a bracket F is secured, within which a bolt or bar G reciprocates. On the upper end of the bar is an ear *a*, which fits into the notch *a''* to retain the bar C in its proper position. A point A' pro- 70 jects into the under side of the cross-bar C to hold it securely. The bottom part of the bracket F is supplied with rack-teeth. The lower end of the bolt G projects slightly outward, and to it is pivoted the lever H. Upon 75 the lever H is a pawl or dog I for engaging the rack-teeth H, and it is pivoted at a point which lies within a line through the center of the pivot between the lever and the bolt and the point of contact with the dog and 80 the rack. It will be seen that when the lever is pressed close to the bracket F the pivotal point of the dog I will pass the dead-center, and the lever will be automatically locked. A number of teeth are provided on the rack 85 to permit of a proper adjustment to put due strain upon the screen B, so that its edges will come close enough to the window-casing to prevent the passage of insects.

To apply my improved screen, the bar D is 90 secured to the bottom of the screen and inserted under the brackets E. The bar C is secured to the top of the screen at a proper height to come within the window-casing. It is then placed upon the bolt or bar G. The 95 dog I is adjusted at the proper point, the lever H is pressed close to the casing, and the screen will be found to be drawn perfectly tight in position. This makes it possible to place the screen over a window from the in- 100 side without the use of ladders or scaffolding.

I desire to state that my improved window-screen can be considerably varied in its details without departing from my invention.

The fastening devices can be located at the bottom, with the brackets E at the top of the window, and in narrow windows the bars can be placed upon the sides of the window and the corresponding change of the position of the fasteners and brackets made. Other styles of fastenings might be used where a window-screen and the cross-bars are constructed as I have indicated and the screen still be attached to the window from the inside.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a window-screen, the combination of the window-screen B, cross-bar D at one end thereof; the brackets E, E, on the window casing or frame to engage said cross-bar; cross-bar C with notches a'' therein; molding C' clamping the screen onto said bar C at the opposite end, so that the molding shall project beyond the inner edge of the casing; a fastening device consisting of the brackets F with bolts G therein, having ears a to pass into notch a'' between the cross-bar C and the molding C'; a lever H pivoted to the bottom of said bolt or bar; and a dog upon said lever so pivoted in relation to the pivotal point of the lever H that when the lever is moved next to the casing the pivot of the dog passes the dead-center and locks the same in position, as specified.

2. In a window-screen, the combination of cross-bars to each end of the screen; suitable fasteners for one of the cross-bars; and a tension-fastening for the opposite cross-bar, con-

sisting of the bracket F with the bolt G therein; the lever H pivoted to said bolt and the dog I pivoted to said lever so situated that when the lever is pressed next to the casing the pivot of the dog passes the dead-center and locks the same in position, as specified.

3. In a window-screen, the combination of the screen B, bar D at one end with suitable means of attaching the same to the window-casing; bar C at the opposite end; the molding C' to clamp upon said bar and hold the screen between the two; a bolt G with an ear a to project between the bar C and the molding C'; suitable means of supporting the bolt on the casing inside the screen and means of adjusting the same, coacting as specified.

4. In a window-screen, the combination of the screen B; bar D, at one end with suitable means of attaching the same to the window-casing; bar C, at the opposite end of said screen; the molding C', to clamp upon said bar C, and hold the screen between the two; a bolt G, with an ear a , to project between the bar C, and the molding C', and pointed lug a' , to engage the bar C, to prevent its rotating; and suitable means of supporting the bolt on the casing inside the screen and means of adjusting the same coacting as specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

EUGENE COOK. [L. S.]

Witnesses:

G. FRED RUSH,
C. G. RUSH.