

(No Model.)

J. W. CARMAN.

WINDOW SCREEN.

No. 277,111.

Patented May 8, 1883.

Fig. 1.

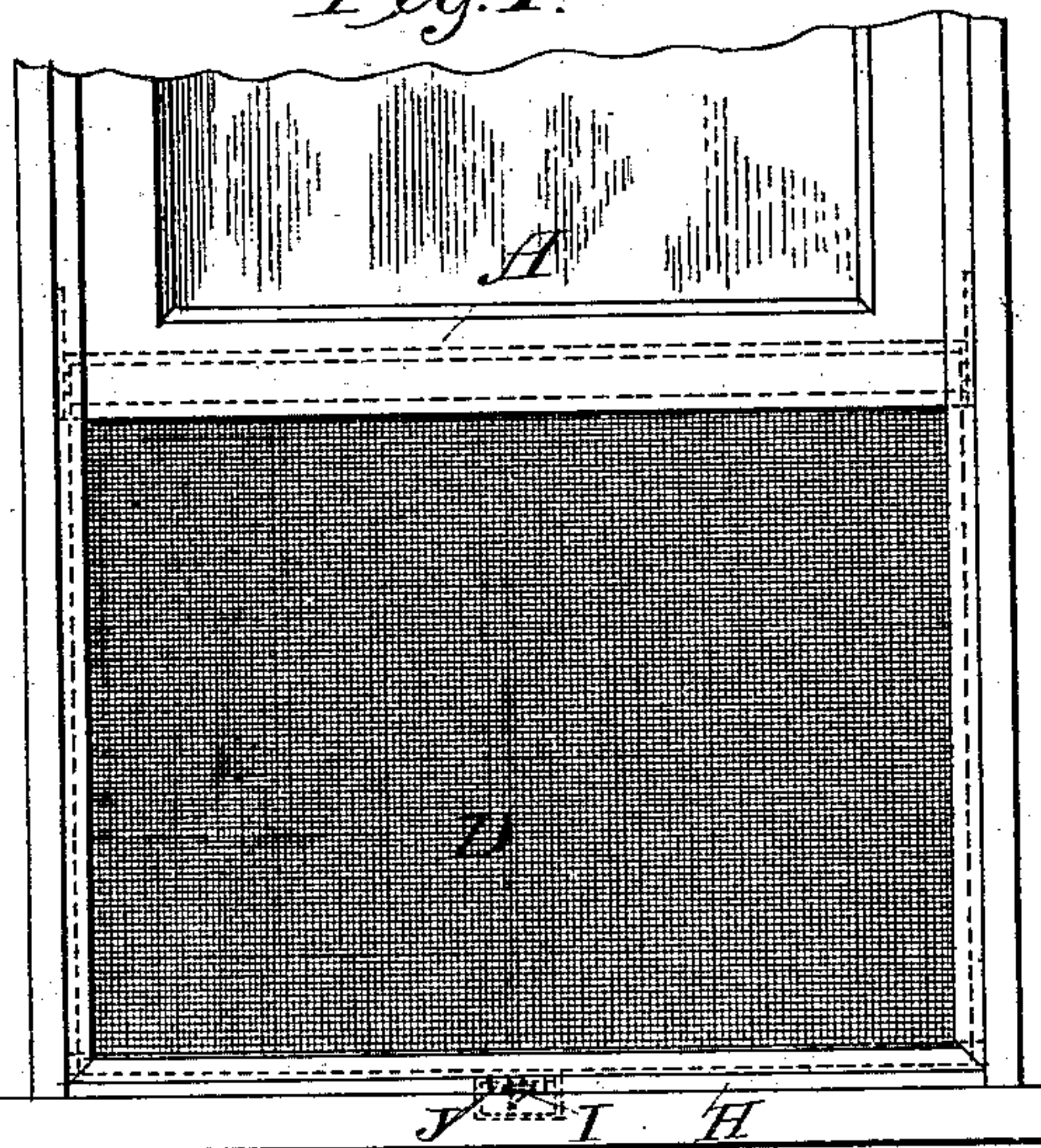


Fig. 2.

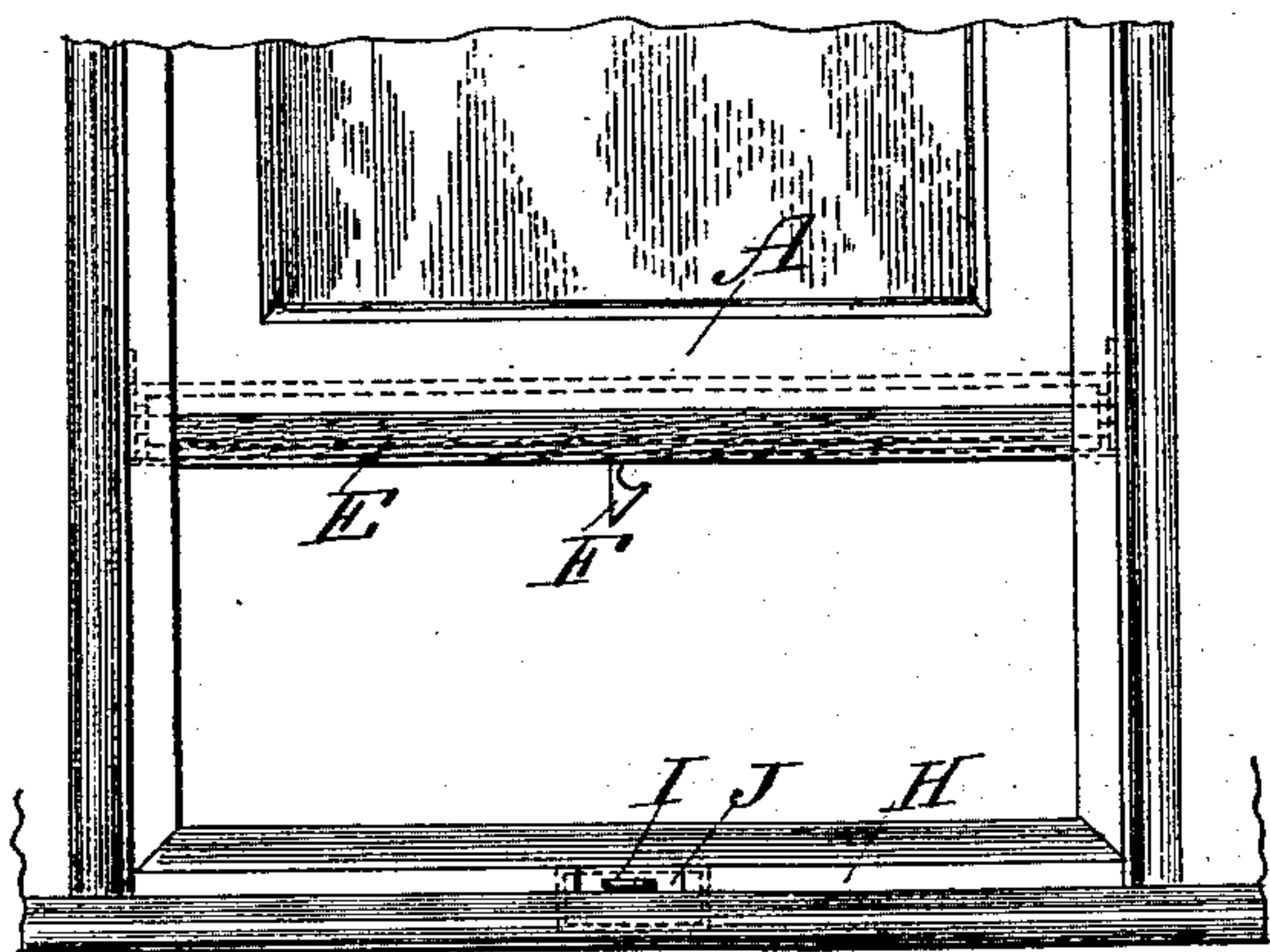


Fig. 3.

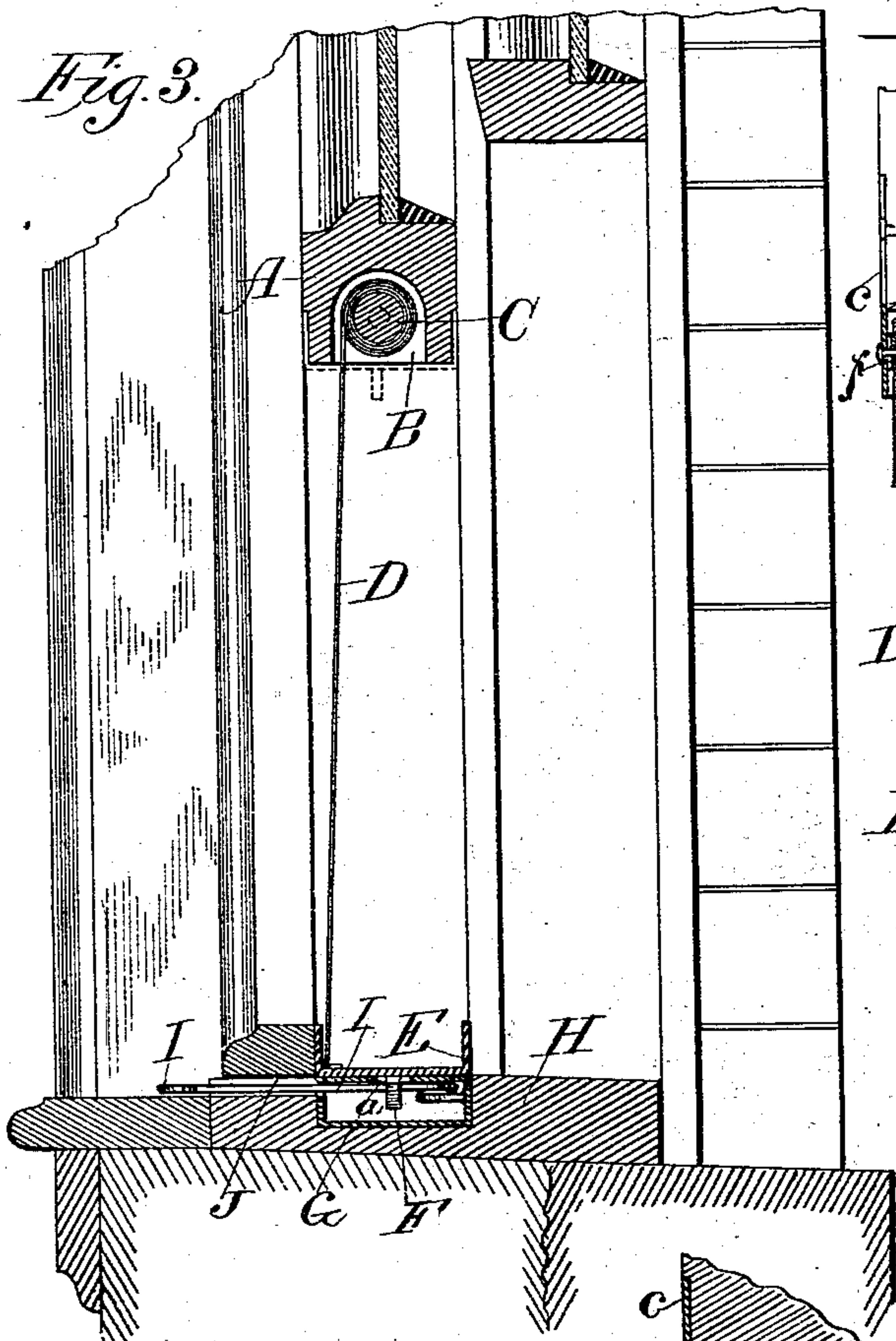


Fig. 4.

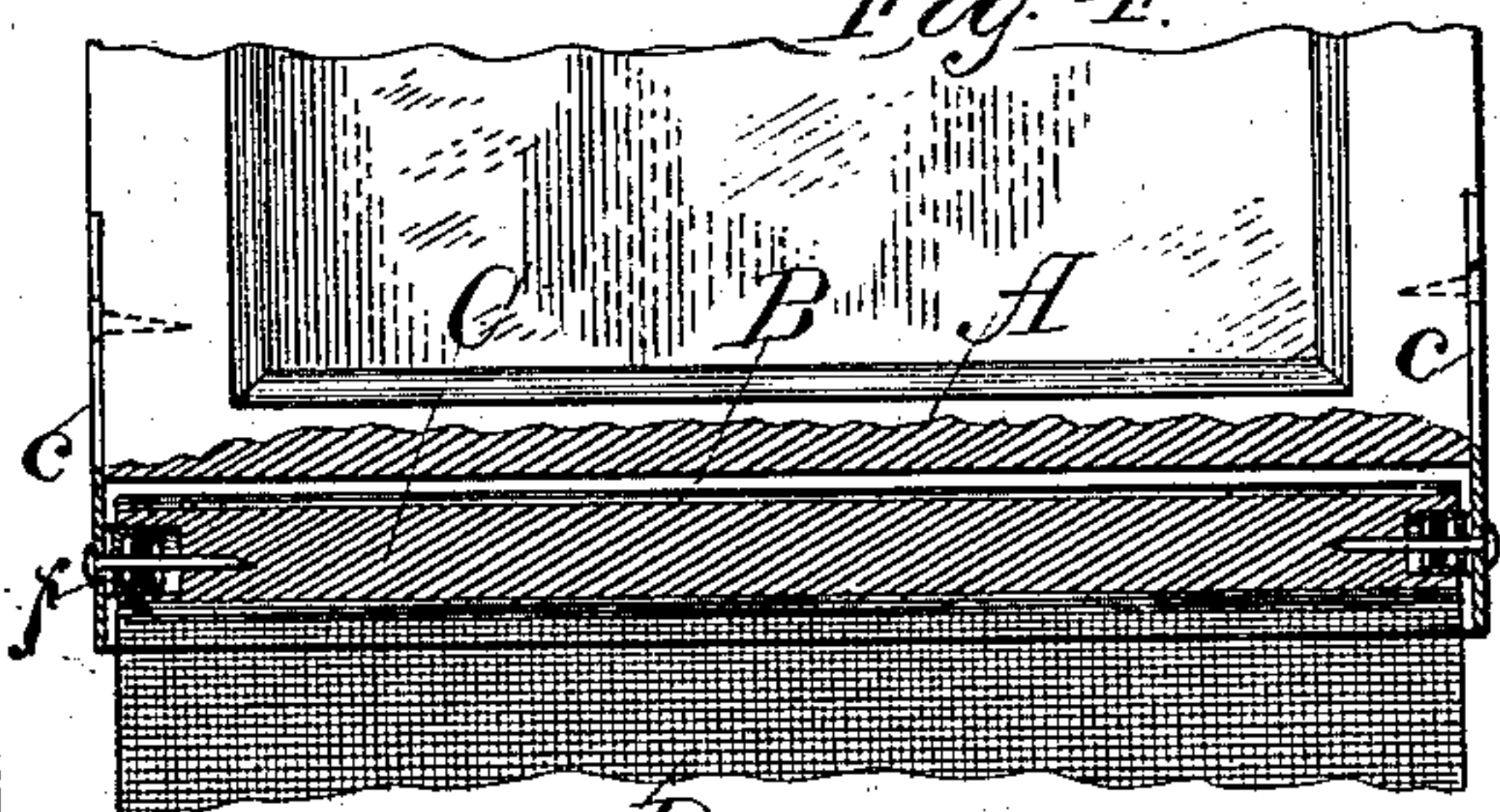


Fig. 5.

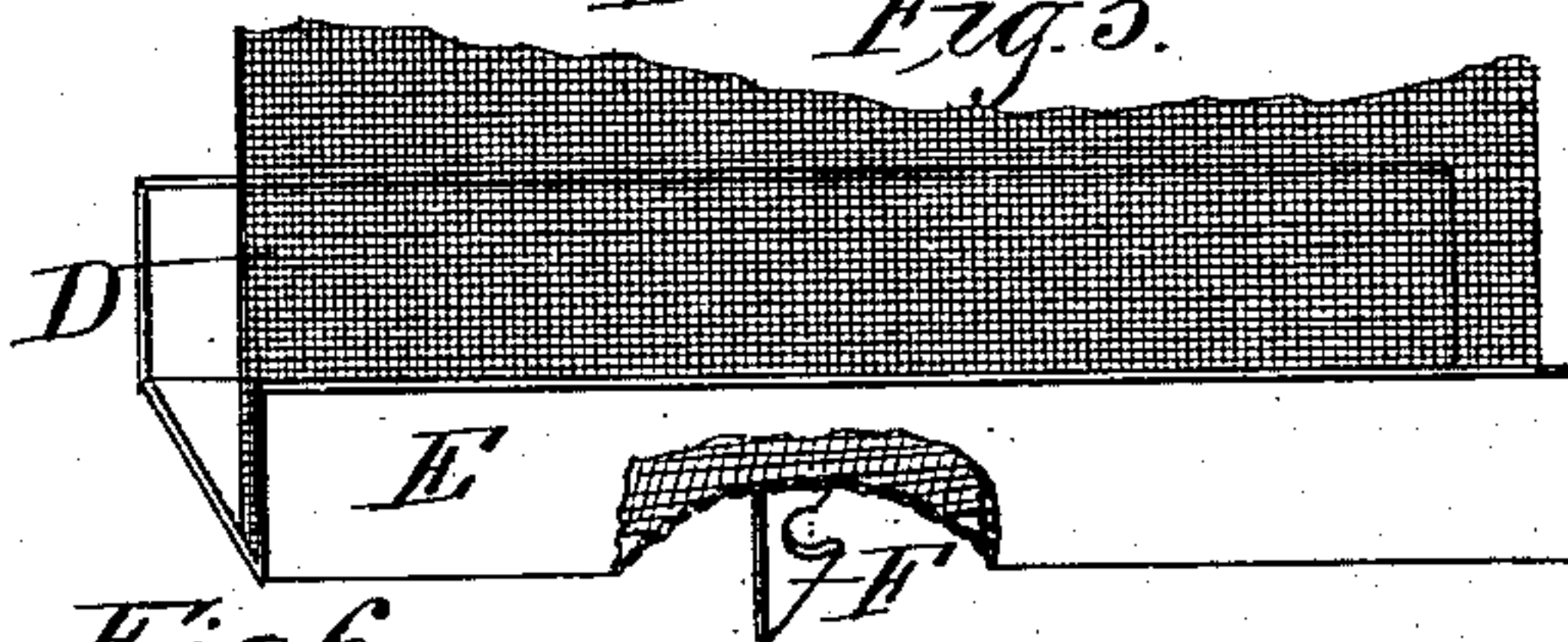
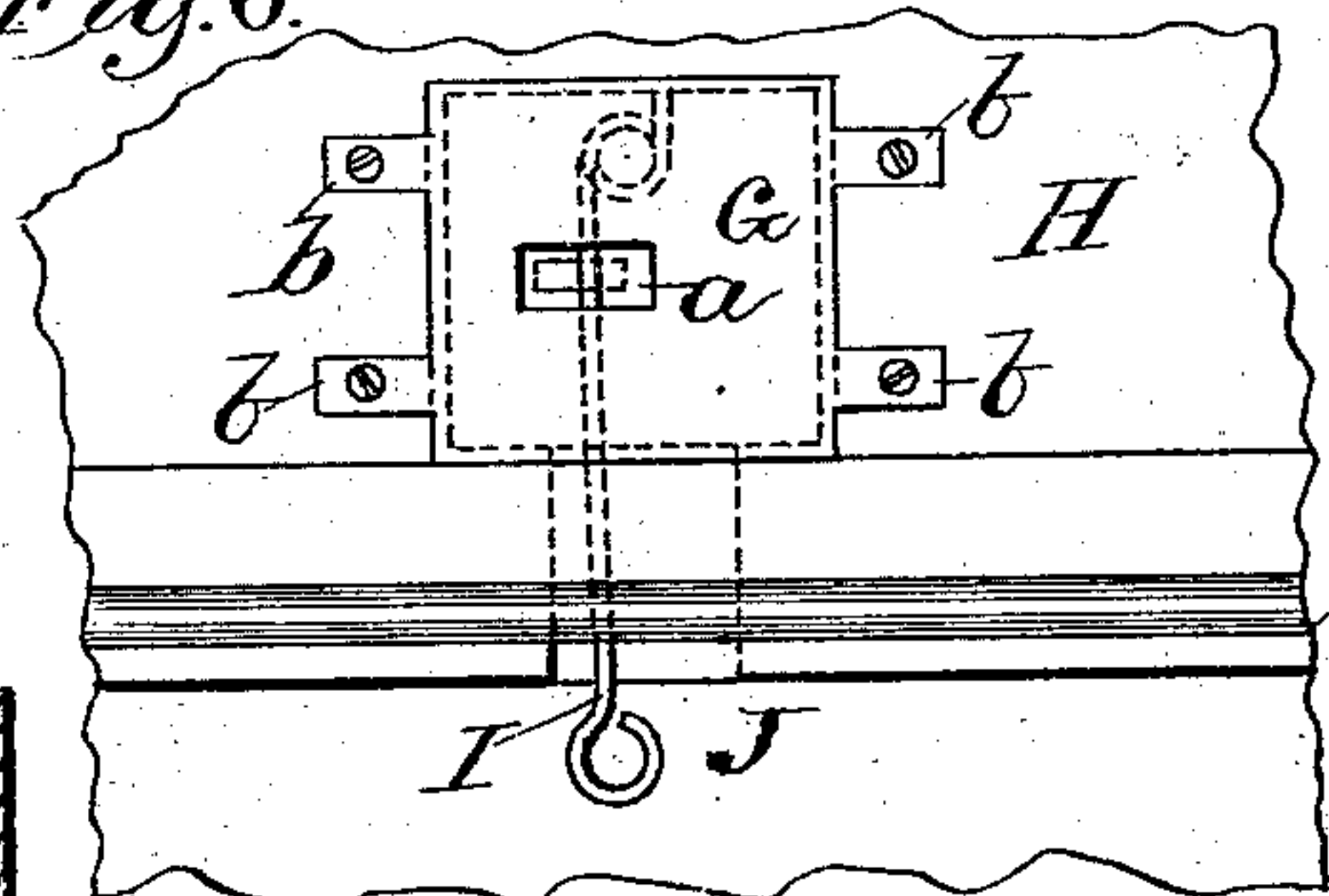


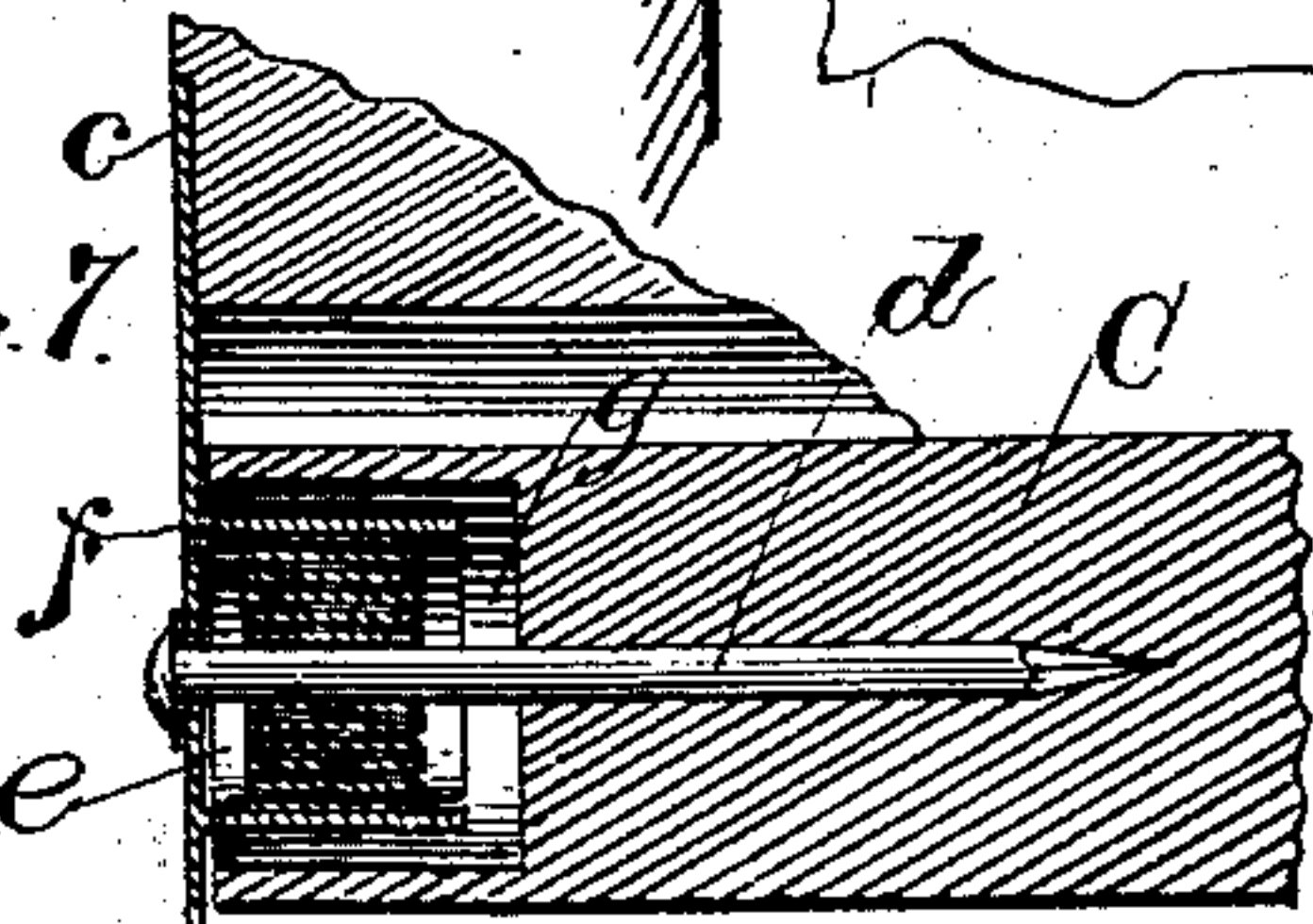
Fig. 6.



Witnesses: *Fig. 7.*

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TO EDGAR TERHUNE, OF CHICAGO, ILLINOIS, AND GEORGE F. PATTER-
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WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 277,111, dated May 8, 1883.

Application filed February 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. CARMAN, a citizen of the United States, residing at Fort Atkinson, in the county of Jefferson and State of Wisconsin, have invented a new and useful Screen for Windows, of which the following is a specification.

My invention relates to improvements in window-screens in which a roller and springs are used in conjunction with the sash or frame of the window; and the object of my improvement is to stow away the screen, when desired, out of the way and automatically restore it to position again. I attain this object by mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation, showing sash raised and exposing the screen. Fig. 2 is an elevation with sash raised and screen stowed away, with the screen-guard in position covering the screen in the sash. Fig. 3 is a vertical section with the screen-guard secured on the window-sill by a lock and sash raised. Fig. 4 is a detail with the bottom of the sash broken away, showing screen-roller in section. Fig. 5 is a detail of screen-guard, showing hook for securing the same to sill and the screen attached to the bottom of it. Fig. 6 is a detail top view of the lock sunk in the sill. Fig. 7 is a sectional view, showing one end of the roller with spring-chamber and scroll-spring therein.

Similar letters refer to similar parts throughout the several figures.

A is the lower rail of the sash, in the bottom of which is groove B for the reception of roller C. In each end of roller C is a cup-shaped cavity, in the center of which are pins *d*, driven into the roller, leaving the ends to project sufficient for bearings in the hanger-plates *c c*, which are made to cover the ends of the roller, and are permanently secured to the edge of the sash above. To the hanger-plates *c c*, about the pin-hole inside of the hangers, are secured bands or rings *f*, which are made to fit loosely inside of the cavity *g* in roller C, and thereby becomes a part of the

hanger. (Shown in Fig. 7.) The roller C is designed to rest and revolve upon the pins *d*; but, if desired, they may be left to rest and revolve upon the rings or flanges *f*. The roller C is provided with springs *e* to operate it, which are in this case in the form of a scroll, the side view only being shown. They are placed inside of the rings *f*, one end of which is secured to the ring and the other to the center-pin *d*.

The upper edge of the screen-cloth D is secured to roller C, and the lower edge to the inside of screen-guard E, Figs. 4 and 5. The guard is trough-shaped, the edges being turned upward. The length is equal with the width of the screen. When in position as in Fig. 2, it covers groove B like the covering of a box, inclosing the screen completely.

The springs *e* are set under full tension when the screen is fully unrolled. Release the screen-guard and the screen will roll to position.

The window-sill H is provided with a lock, G, sunk in the sill to lock down the screen-guard E.

When the sash is lowered from the position shown in Fig. 2, the catch F enters slot *a* in lock G, pressing spring I one side until it snaps into the notch, which locks it to the sill H.

Spring I projects forward through slot J in the window-sill for the convenience of unlocking the guard.

To set the screen as in Fig. 1, when the sash is down, leave the screen-guard locked and raise the sash. To stow away the screen again, unlock the screen-guard and the springs *e* will roll the screen to position, as shown in Fig. 2.

The stow-away roller C may be located in or upon the window-sill instead of the sash, and the guard locked to the sash, merely reversing the order of operation.

I am aware that similar springs and rollers have been heretofore used for hanging window-curtains, and are not new. Therefore I do not claim such a device, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

5 In screens for windows, the roller C, mounted upon the window-sash, with mechanism for stowing the same automatically away for protection, substantially as described, in combination with guard E and lock G, for fast-

ening and releasing the lower end of the screen, substantially as and for the purpose set forth.

JOHN W. CARMAN. [L. S.]

Witnesses:

D. G. CRAIG,
THOMAS CRANE.