

(No Model.)

A. W. LOVEJOY.

WINDOW SCREEN.

No. 272,068.

Patented Feb. 13, 1883.

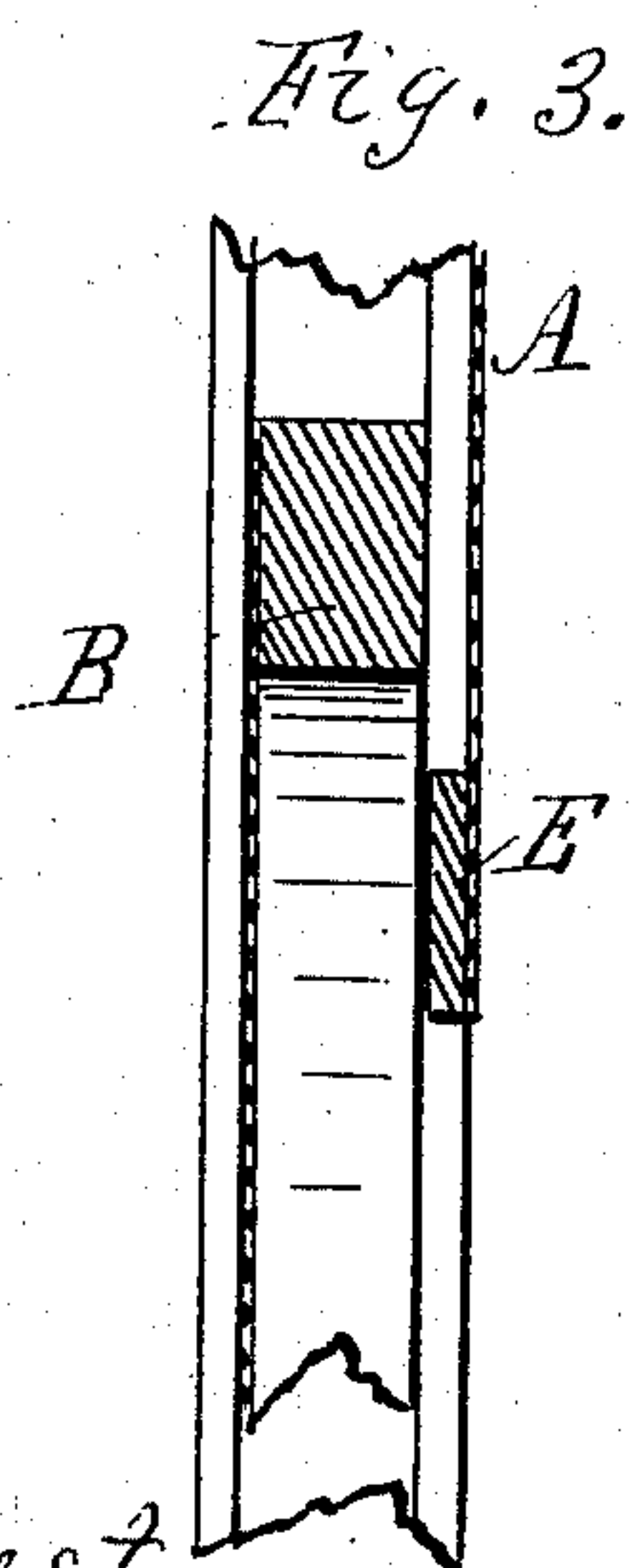
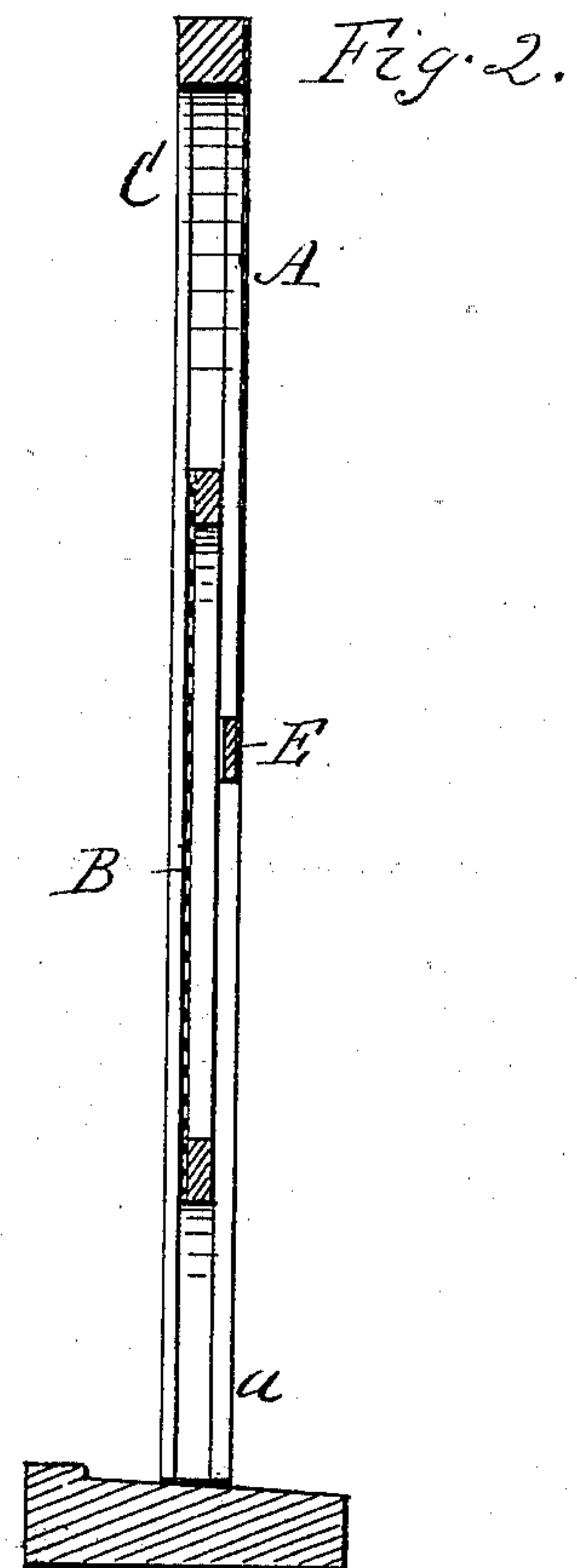
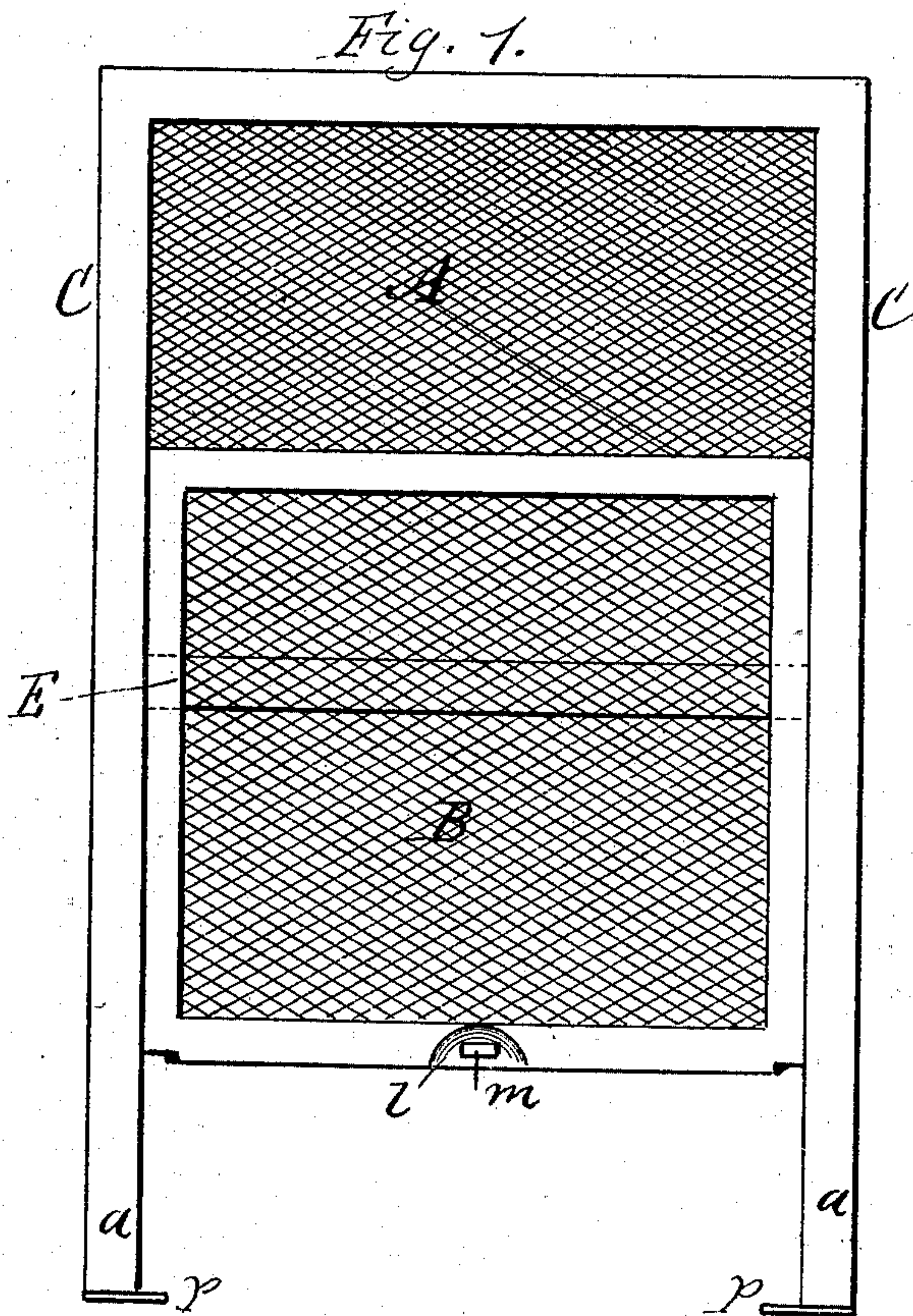


Fig. 4.

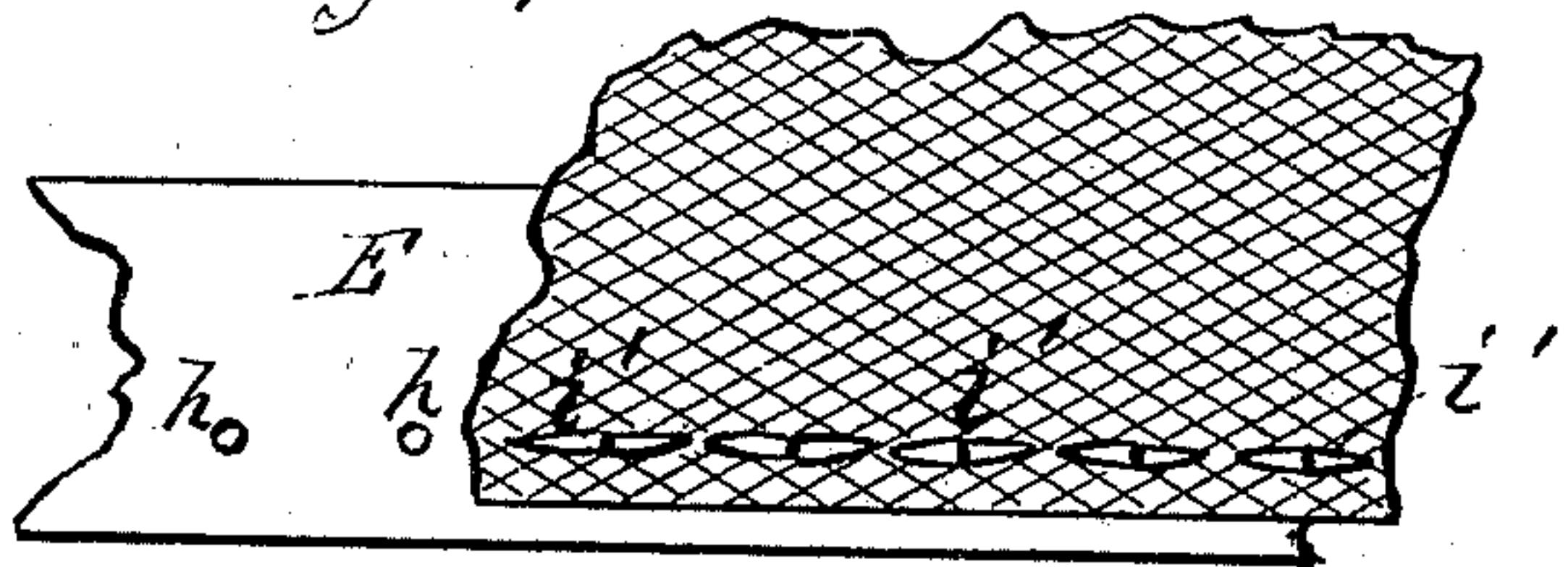


Fig. 5.

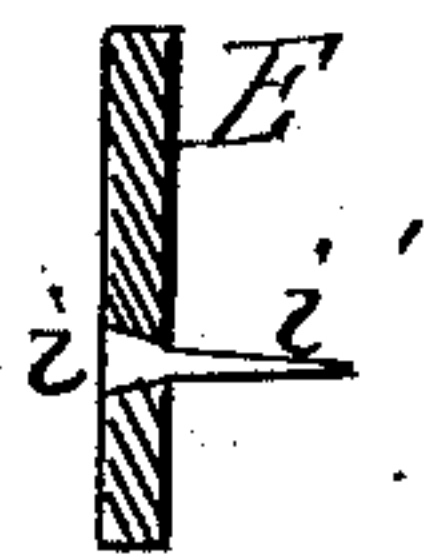


Fig. 7.

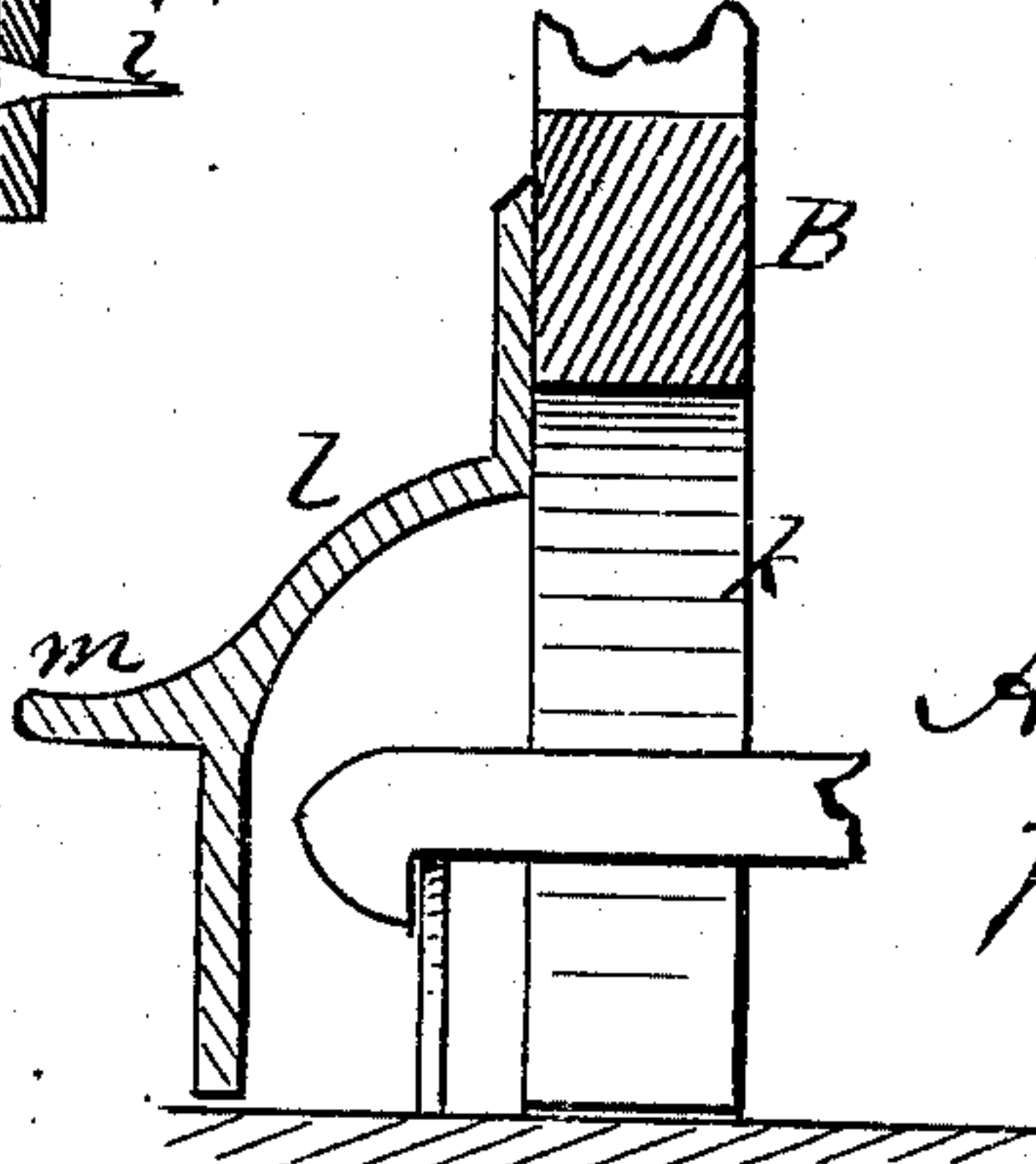


Fig. 6.



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WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 272,068, dated February 13, 1883.

Application filed October 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, ANDREW W. LOVEJOY, of Rochester, Monroe county, New York, have invented a certain new and useful Improvement in Window-Screens; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of the screen with the lower sliding section partially raised. Fig. 2 is a vertical cross-section of the same. Fig. 3 is a similar view on an enlarged scale. Fig. 4 is an elevation of a portion of the metallic cross-bar and a portion of the wire-netting attached thereto. Fig. 5 is a cross-section of Fig. 4. Fig. 6 is a view of one of the fastening devices for securing the netting. Fig. 7 is a section of the lower end of the sliding frame, showing the means for allowing closing of the blind-catches.

My improvement relates to that class of window-screens in which a frame is used, to which the netting is attached, and a sliding lower section is employed, which can be raised for opening the blinds, throwing water out of the window, &c.

The distinguishing features of the invention are an open bottom to the screen-frame, by which the window-sill under the frame can be readily cleaned without removing the frame; also, in a window-screen, the combination, with the frame, of a thin metallic cross-bar provided with a series of holes, and double-pointed tacks passing through the holes, securing the wire-netting; also, the combination, with the sliding section, provided with a hole at its bottom, of a convex shield or cover on the inner side, inclosing the blind-catch, that passes through the hole in the sliding section.

In the drawings, A shows the stationary upper section of the screen, and B shows the lower sliding section.

C is the main frame, which sets in the window-frame. It is of rectangular form, as usual, but differs from common frames in being entirely open and unobstructed at the bottom, the ends of the side pieces, *a a*, of the frame simply resting on top of the window-sill and no cross-bar being used at the bottom. This is clearly shown in the front elevation, Fig. 1. By this means two advantages are secured—

first, the window-sill can be brushed off and cleaned without difficulty, as its surface is uncovered, and, second, the lower sliding section of the screen can be inserted and removed without difficulty by simply slipping it in or out through the open bottom.

In all other screens of the kind with which I am acquainted the lower end of the main frame has a cross-bar which extends across the window-sill, inclosing the sliding frame, and this bar forms a stop to dirt, which collects on the sill and which cannot be brushed over it, and in order to clean the sill the whole screen must be removed. The upper section of wire is attached to the upper half of the main frame, and is a permanent part of it. The lower section of wire is attached to the sliding frame B, the latter sliding up and down in grooves in the sides of the main frame, and being capable of being raised one-half the height of the main frame. The screen may be made of a size to cover the whole opening of the window or only one-half of the same, in the latter case resting under the edge of the upper sash. Where it fills the whole opening of the window the lower sliding section can be raised to such a height as to expose the whole lower sash, allowing a full opening of the lower sash, and allowing washing and cleaning of the same without removing the screen. So far as I am aware, heretofore but slight opening of the lower screen has been made, just sufficient to operate the outside blinds by reaching the hand through.

In large frames of the kind just described it is necessary to make the frame B of the lower sliding section of considerable transverse thickness, in order to give proper strength and prevent shaking and trembling. The main screen has a cross-bar, E, midway of its length, to which the lower edge of the upper section of wire is attached. In ordinary screens this cross-bar is made of wood, and necessarily occupies about one-half the transverse thickness of the frame. The sliding section slides back of this cross-bar, and is necessarily very thin, and in large screens lacks strength and stiffness. To obviate these difficulties I make the cross-bar E of metal, which has the requisite strength, and can be made very thin transversely, thereby allowing the sliding section

to be made correspondingly thick and to occupy nearly the whole transverse thickness of the main screen-frame. The metallic cross-bar E has a series of holes, *h h h*, formed therein
 5 at regular distances apart, and through these, from the back side, tacks *i i*, having split points *i' i'*, are passed, the points passing through the wire and being spread and headed down in opposite directions, and clasping the
 10 wire, as shown in Fig. 4.

If desired, the frame of the sliding section may be made of metal, and the wire may be attached in a similar manner to that above described, or in any desired way.

15 In a screen of this kind, which rests in the window-frame outside the outer sash, provision must be made to receive the blind catches or fastenings within the lower edge of the sliding section. For this purpose I cut a hole, *k*, in
 20 the lower edge of the frame, through which the catch passes, and inside of this I attach a convex shield or cover, *l*, to the frame, standing inward beyond the catch and extending down on a line with the lower edge of the frame, as
 25 shown in Fig. 7. The shield is in form similar to one style of drawer-pulls, and it may have a finger-piece, *m*, for raising the screen. By this means the blind-catch is allowed to work, and insects are excluded.

30 If desired, the frames may be made double—that is, two frames used in a window, each occupying one-half the width of the window.

If it is desired to fasten the frame to the

window-sill, small iron plates *p p* may be attached to the ends of the frame and screwed 35 to the sill.

Having thus described my invention, I disclaim a window-screen having a sliding lower section.

What I claim as new, and desire to secure by 40 Letters Patent, is—

1. In a window-screen consisting of an upper stationary and a lower sliding section, the main frame C, constructed with an open bottom and without a cross-bar to facilitate clean- 45 ing of the window-sill and allow ready insertion and removal of the sliding section.

2. In a window-screen, the combination, with the frame C, of the thin metallic cross-bar E, provided with a series of holes, *h h*, and the 50 double-pointed tacks *i i*, passing through the holes and securing the wire-netting, as herein shown and described.

3. In a window-screen, the combination, with the sliding section B, provided with the hole 55 or socket *k* in its lower edge to admit the blind-catch, of the convex shield or cover *l* on the inner side of the frame inclosing the catch, as herein shown and described.

In witness whereof I have hereunto signed 60 my name in the presence of two subscribing witnesses.

ANDREW W. LOVEJOY.

Witnesses:

R. F. OSGOOD,

R. E. WHITE.