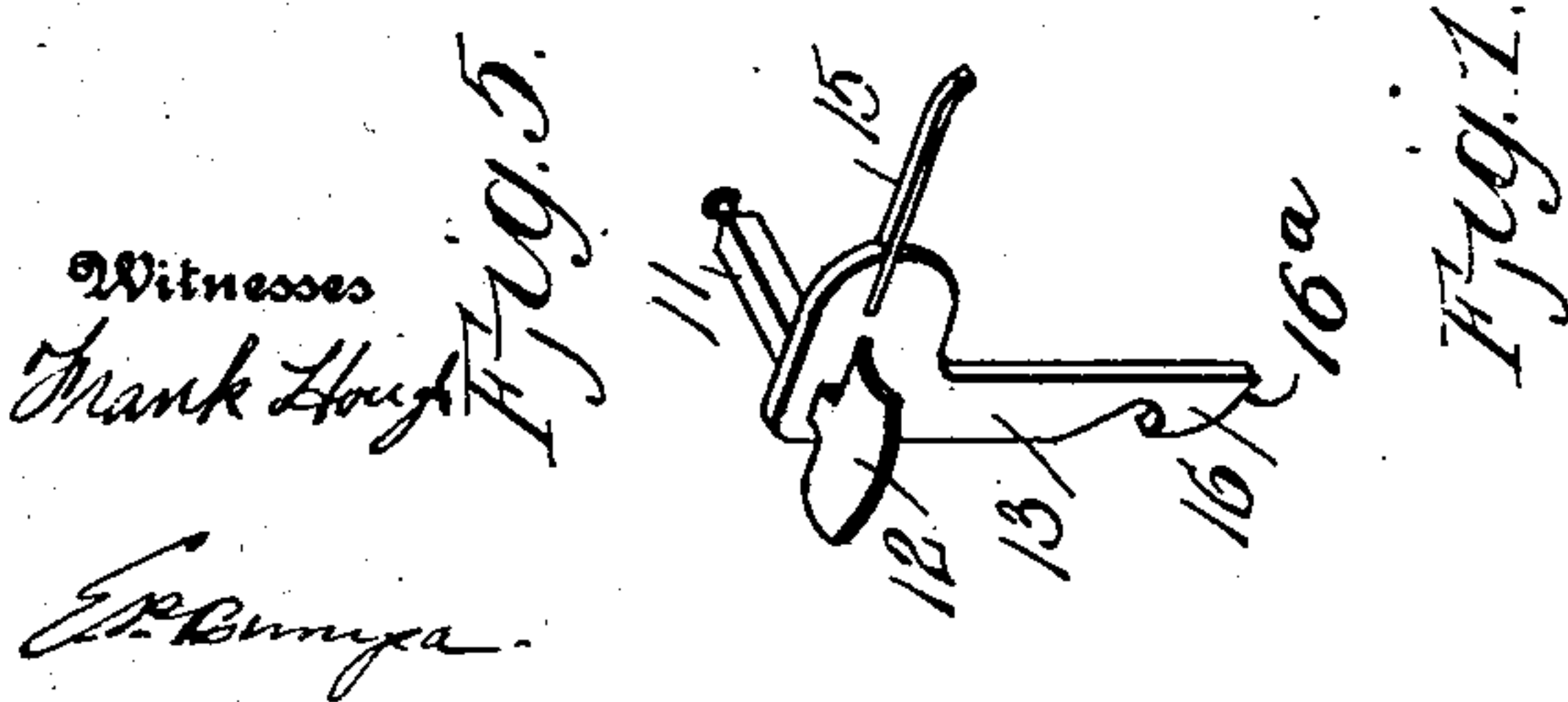
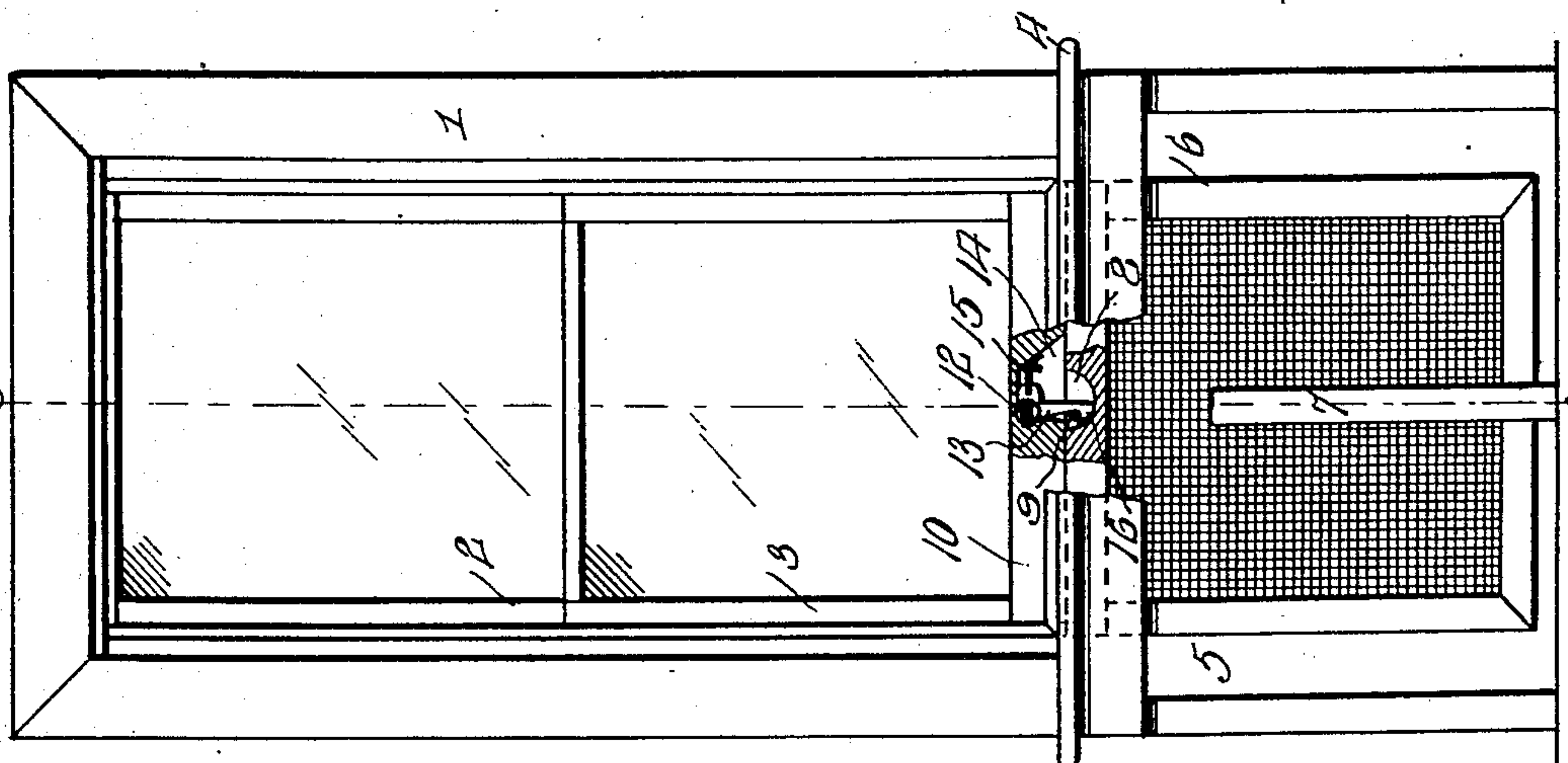
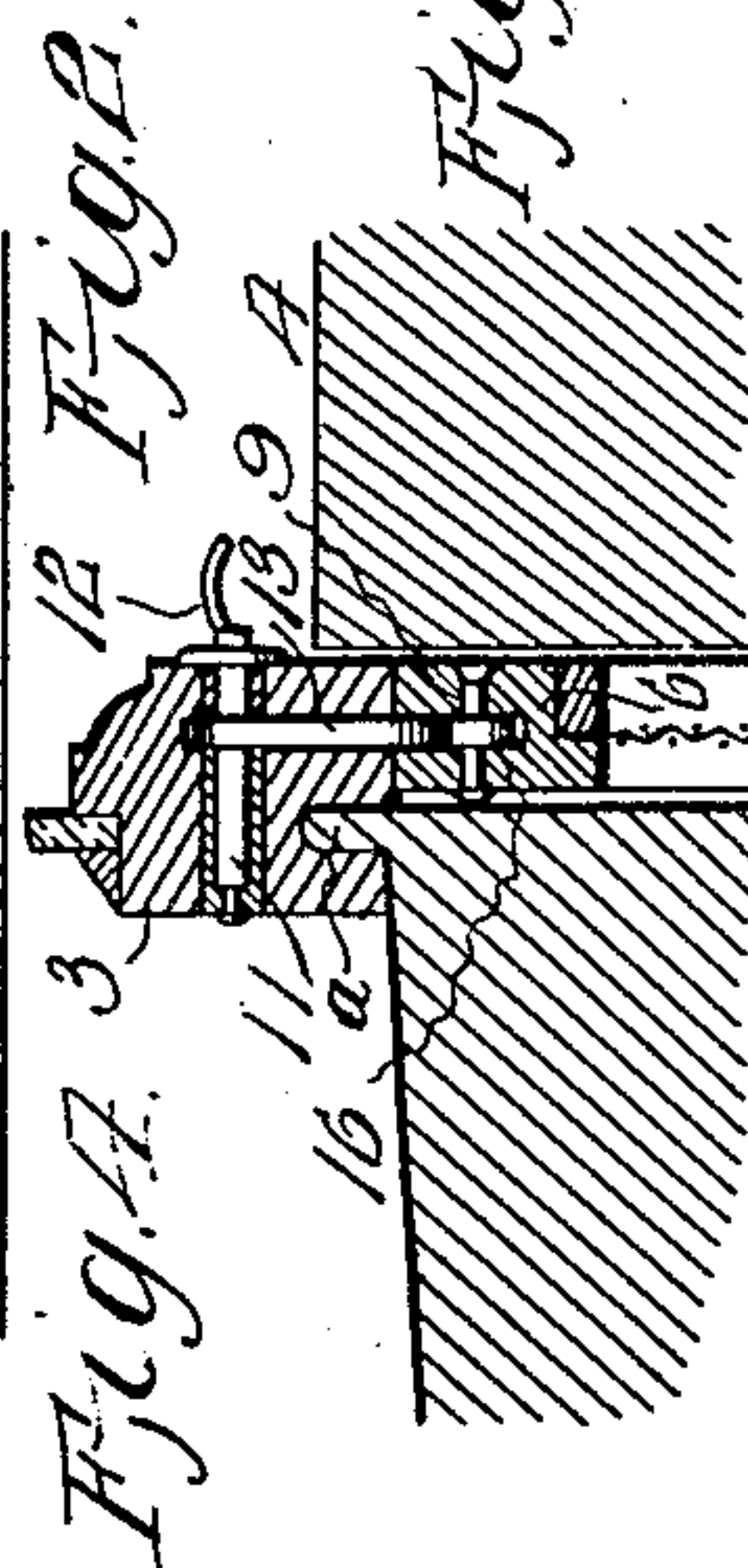
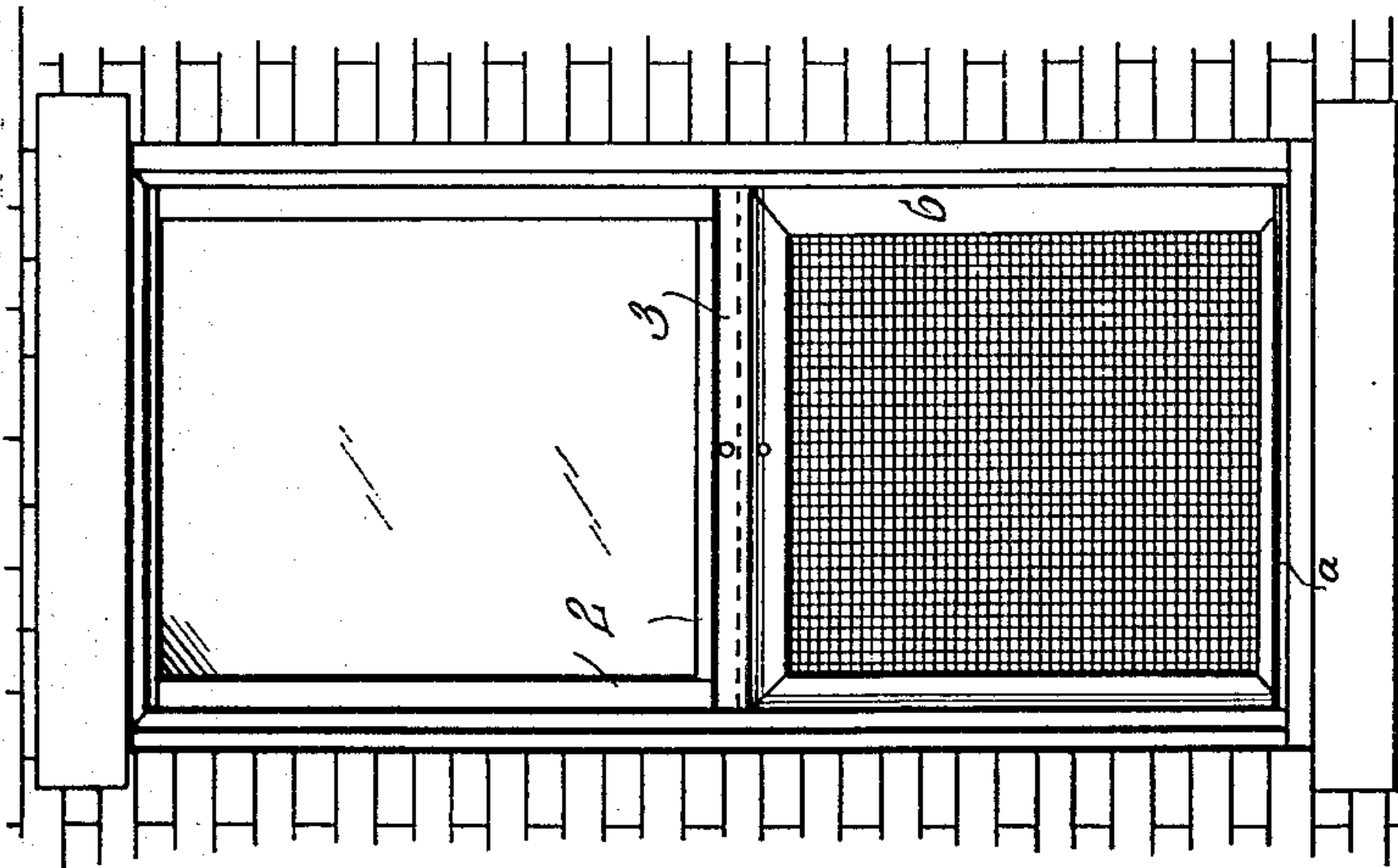
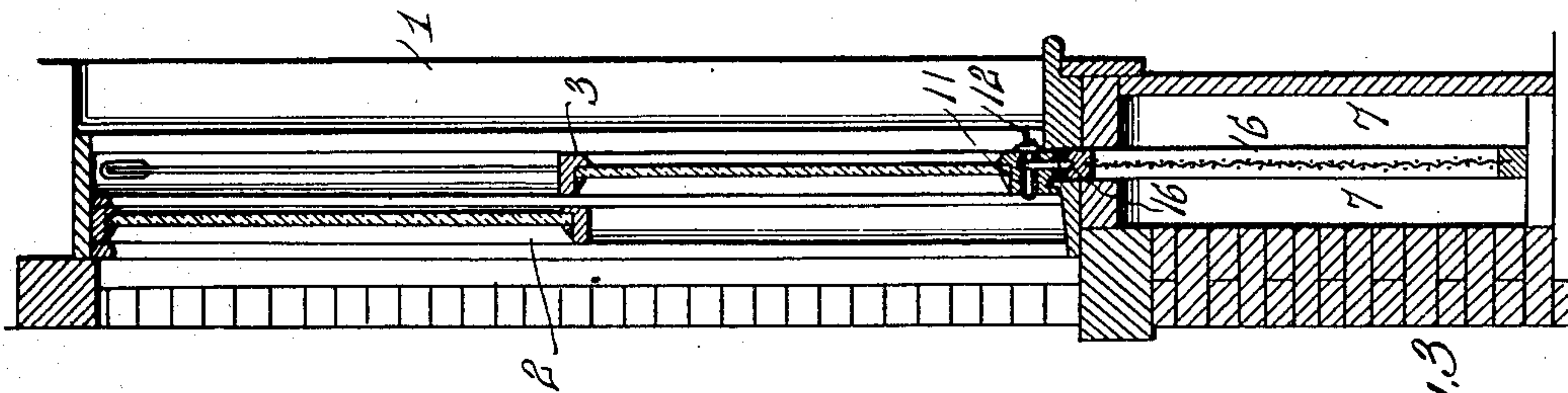


G. AYRES.  
WINDOW SCREEN.  
APPLICATION FILED AUG. 15, 1907.

916,253.

Patented Mar. 23, 1909.



Inventor  
Grove Ayres,  
By Victor J. Evans  
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# UNITED STATES PATENT OFFICE.

GROVE AYRES, OF ATHENS, OHIO.

## WINDOW-SCREEN.

No. 916,253.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed August 15, 1907. Serial No. 388,667.

*To all whom it may concern:*

Be it known that I, GROVE AYRES, a citizen of the United States of America, residing at Athens, in the county of Athens and State of Ohio, have invented new and useful Improvements in Window-Screens, of which the following is a specification.

This invention relates to window screens, and one of the principal objects of the same is to provide a screen fitted into a recess in the window framing and to provide the lower sash with means for attachment to and detachment from said screen so that the window may be raised and lowered without the sash or with the same as required.

Another object of the invention is to provide a sliding window screen and a spring actuated hook for engaging said screen, said hook being connected to the lower cross bar of the lower window sash, and means for operating said hook to engage the screen or to disengage the same at will.

These and other objects may be attained by means of the construction illustrated in the accompanying drawing, in which:

Figure 1 is an elevation and partial section of the inside of a window frame and sash, and showing the window screen in a recess underneath the window sill. Fig. 2 is an elevation looking from the outside of the window, and the screen being shown in place with the lower sash elevated. Fig. 3 is a central vertical section on the line 3—3 of Fig. 1. Fig. 4 is a detail section on an enlarged scale showing the means for connecting the window screen to the lower sash. Fig. 5 is a detail perspective view of the spring actuated hook and the sash lift combined.

Referring to the drawing for a more particular description of the invention, the numeral 1 designates the window frame, 2 is the upper sash, and 3 the lower sash. Underneath the window sill 4, a recess 5 is provided, and a window screen 6 is adapted to slide in said recess. Suitable guide strips 7 upon opposite sides of the screen 6 are utilized to insure a smooth action of the window screen. In the upper frame bar of

the screen 6 a recess 8 is formed and a cross pin 9 spans the recess.

Connected to the lower bar 10 of the lower sash is a pivoted hook comprising a shank 11, a thumb hold 12, and a depending hook 13, said shank being passed through the bar 10 and said hook being seated in a recess 14 with a spring 15 bearing against the wall of the recess 5 to hold the bill 16 into engagement with the pin 9.

From the foregoing it will be obvious that the lower sash may be raised and lowered whenever required without attachment to the screen 6, by turning the thumb hold or sash lift 12, and lifting the sash by means of this hold. Whenever it is required to raise the screen 6, the bill 16 of the hook is engaged with the pin 9, and the screen 6 is raised with the sash 3 by means of the sash lift 12.

My invention is of simple construction, can be applied to any window with very slight alteration, is strong, durable and efficient in use, can be manufactured at slight cost, and owing to the bead *a* which fits a groove in the lower bar of sash 3, provides efficient means for preventing the entrance of snow or ice or rain.

The bill 16 of the hook is provided with a curved lower face 16<sup>a</sup>, and by provision of the spring 15 it will be seen that the said curved face 16<sup>a</sup> lies always in such position that it can be engaged with the pin 9. Assuming the hook 13 to be disengaged from the pin 9 when the lower sash 3 is raised and it is desired to use the screen, it will appear that upon lowering the said sash 3 the hook 13 by reason of the curved face 16<sup>a</sup> of the bill 16 will be automatically engaged with the pin 9.

Having thus described the invention, what I claim is:

A window frame having vertically sliding upper and lower sashes, the lower sash having a recess formed in the underside of its bottom bar, a sliding screen disposed beneath the lower sash, said sliding screen having a recess formed in the upper bar thereof and disposed directly beneath the recess formed in the lower sash, a pin located in the recess

formed in the upper bar of the screen, a hook  
pivotally mounted in the recess formed in the  
bottom bar of the lower sash and provided at  
its lower end with a bill having a curved  
5 lower face, and a spring located in the recess  
formed in the bottom bar of the lower sash  
and engaged with the hook to normally hold  
the same engaged with the said pin and  
adapted to hold the curved lower face of the

said hook in such position that it will engage 10  
the pin automatically when the lower sash is  
at the downward limit of its movement.

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

GROVE AYRES.

Witnesses:

ELI DUNKLE,

HERBERT B. DUNKLE.