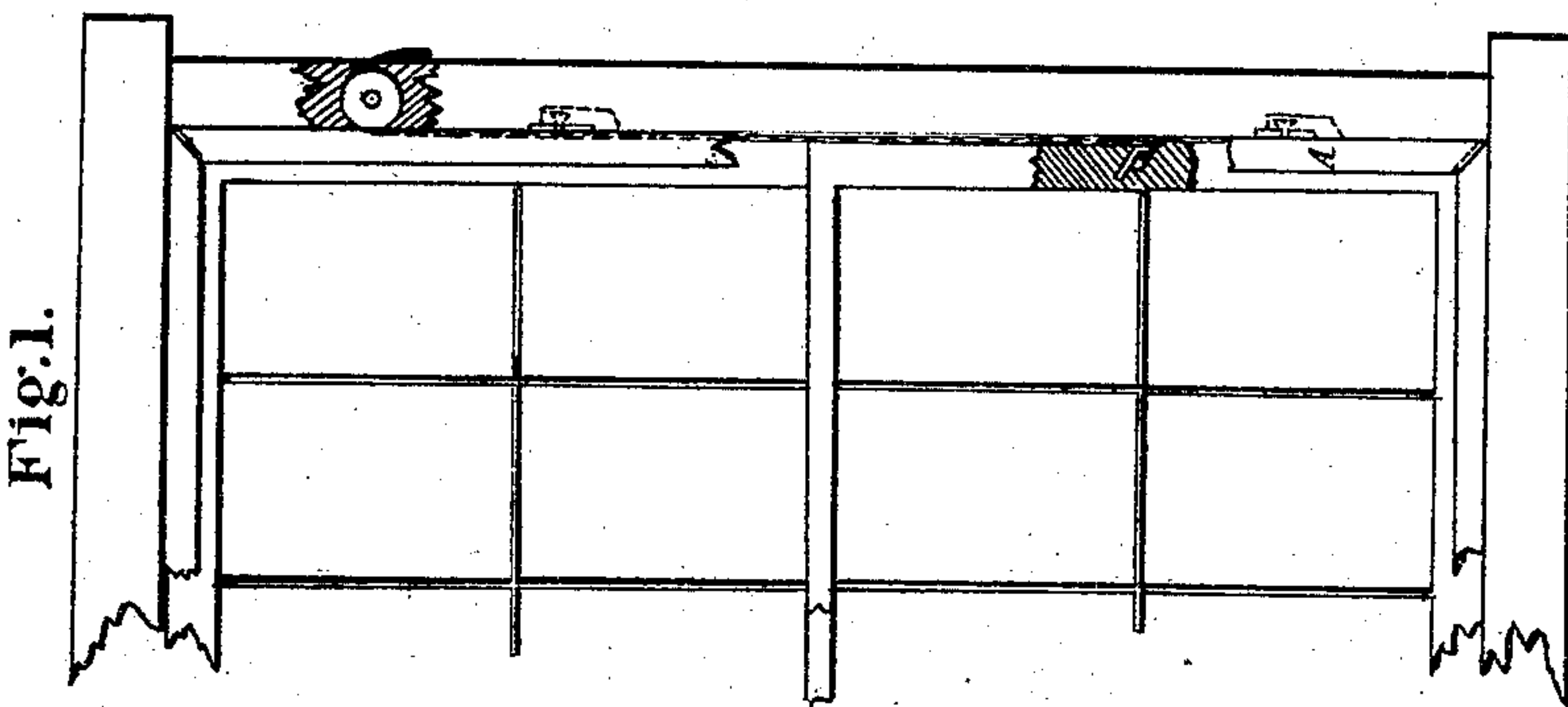
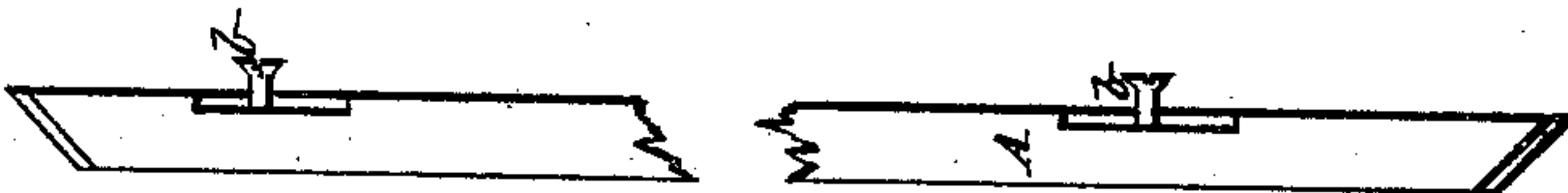
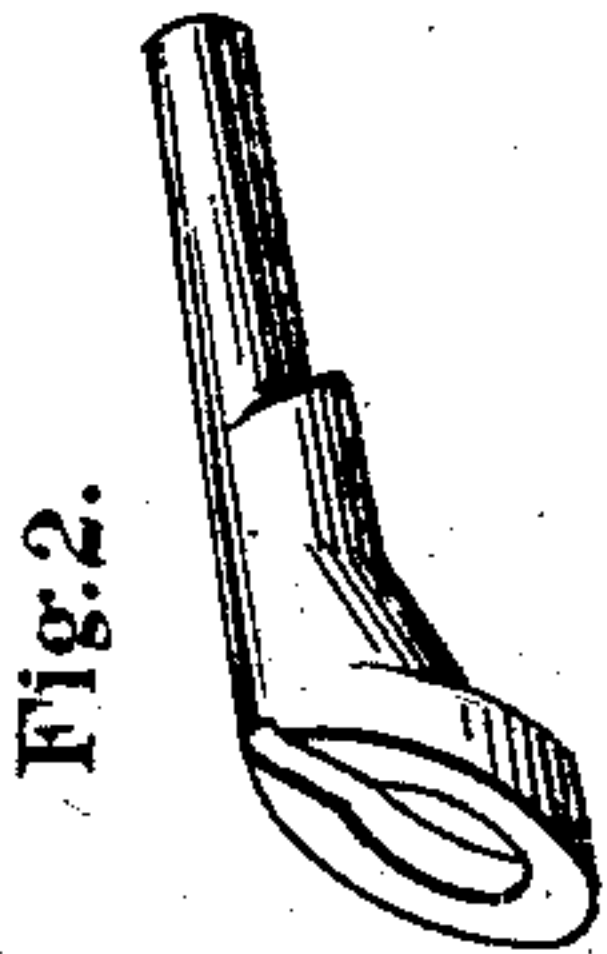
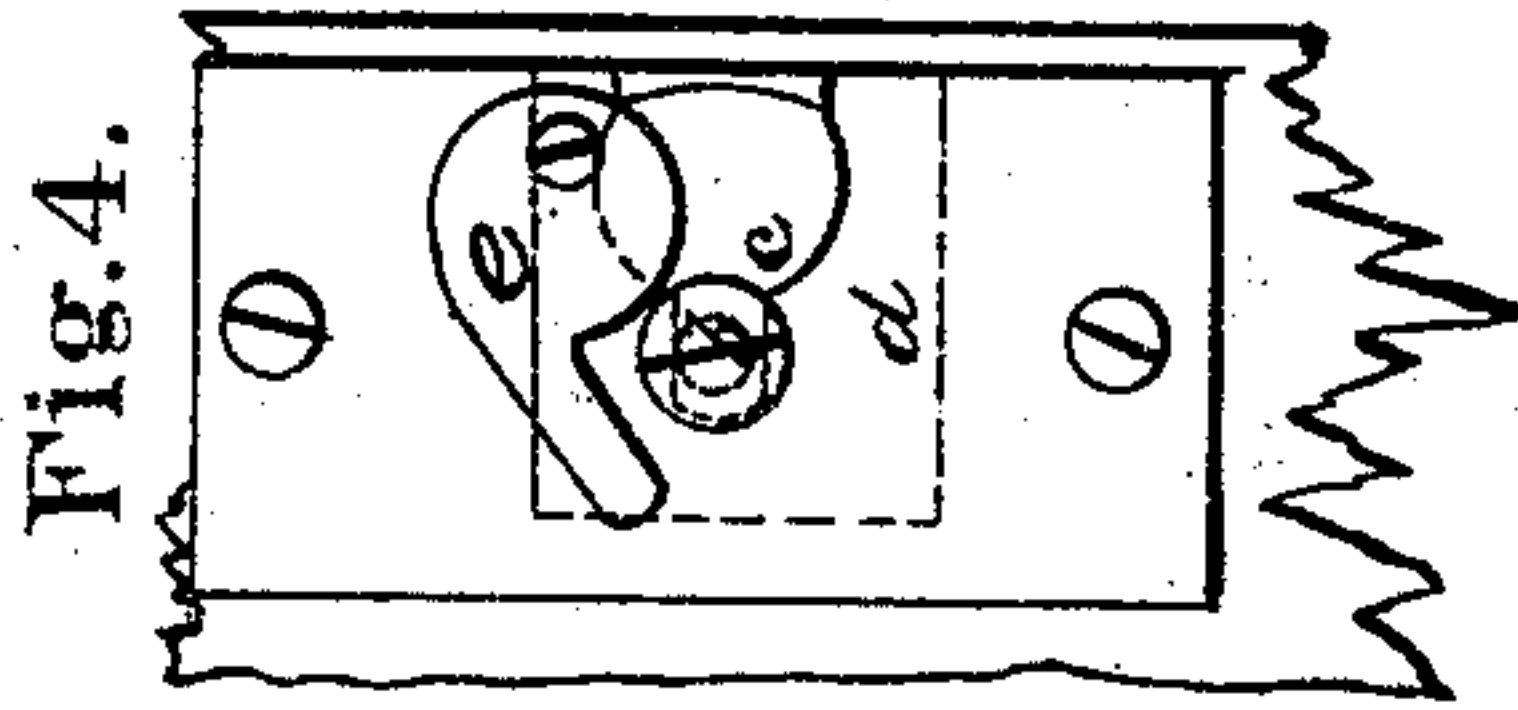
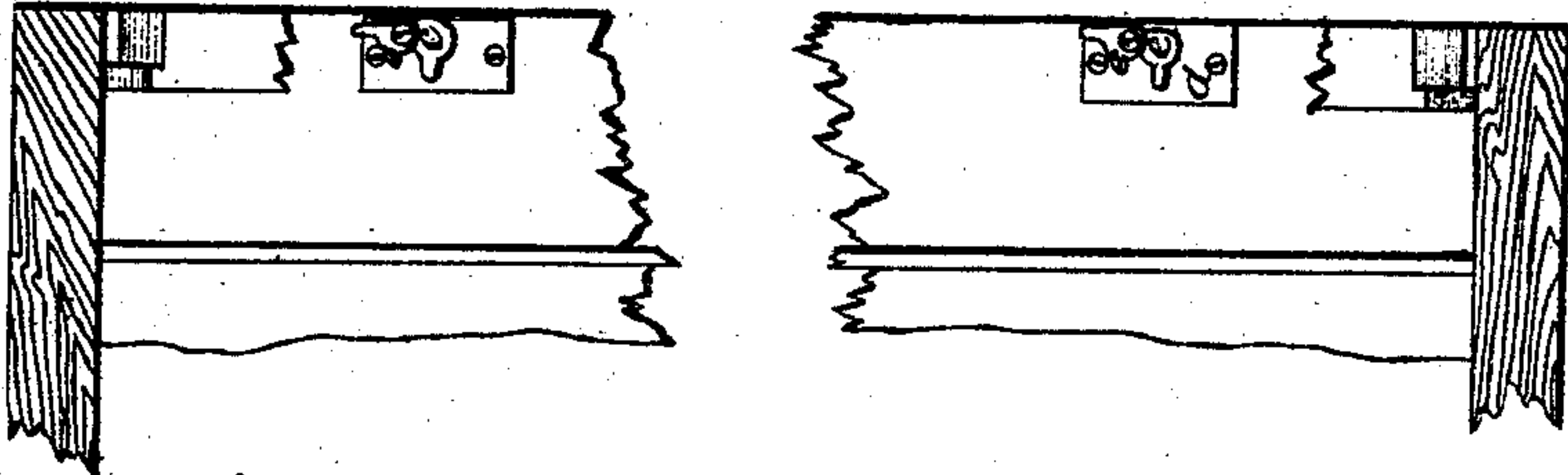
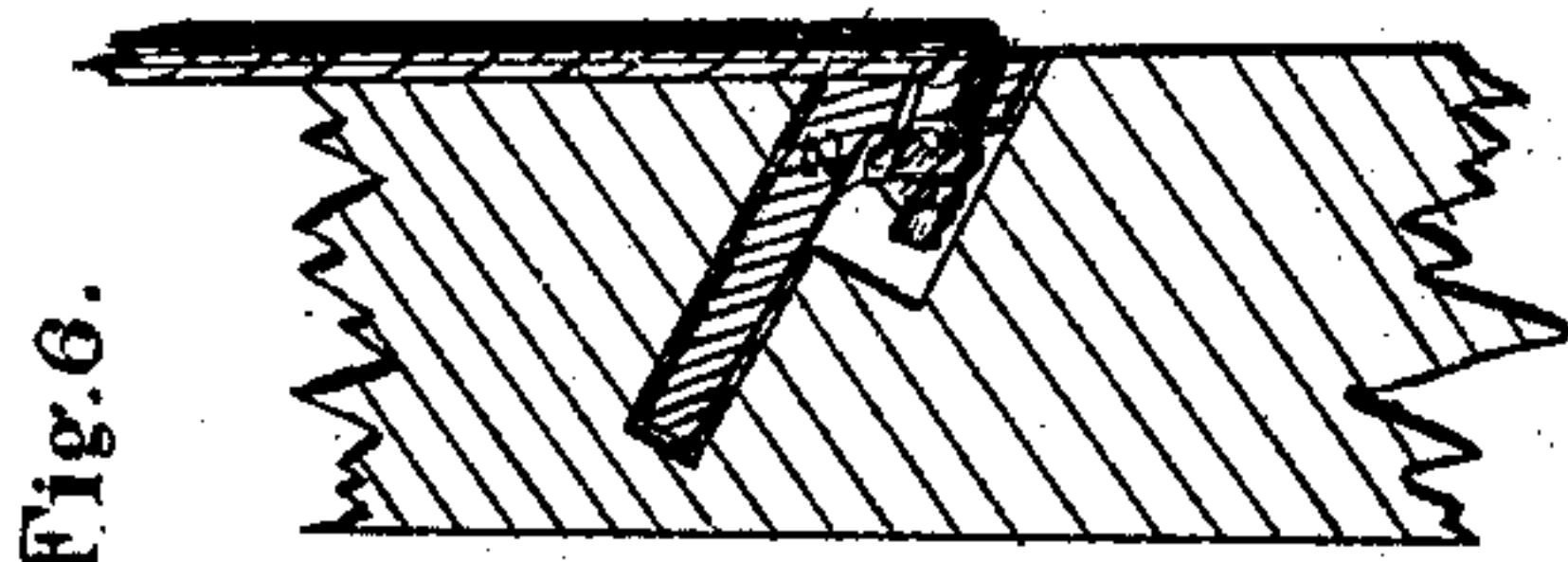


*E. W. Giddings,*

*Window.*

*No. 104,299.*

*Patented June 14, 1870.*



*Witnesses:*  
*A. M. Struth.*  
*Chas. Kanyon.*

*Inventor:*  
*E. W. Giddings*  
*Chipman & Hornum & Co.*  
*Attorneys.*

# United States Patent Office.

ERASTUS W. GIDDINGS, OF JOHNSTOWN, PENNSYLVANIA.

*Letters Patent No. 104,299, dated June 14, 1870.*

## IMPROVEMENT IN WINDOWS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, ERASTUS W. GIDDINGS, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and valuable Improvement in Windows; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawing, is a front view of my window.

Figure 2 is a detached view of the cord-holder.

Figures 3, 4, 5, and 6 are details.

My invention relates to windows, and consists in the construction and novel arrangement of devices designed to facilitate the removal of the sashes, for cleansing or other purposes:

The letter A, of the drawing, designates a removable strip, provided with studs, *b b*, adapted to enter the openings *c c* formed in the plates *d d*, which are secured to the jamb.

These openings *c c* are contracted at their inner ends, so that, when the strips are pushed back into place, the studs will be grasped by this contracted portion, and firmly secured therein by means of the eccentrics or cams *e e* pivoted to the plates *d d*. Thus the strip is effectually prevented from lateral motion, nor can it recede because of the pressure of the eccentrics upon the studs. By simply turning the eccentrics, the strips may be readily taken out.

In order to provide a ready means for detaching the sashes from the balance-cords, the removable cast-iron plug *z* is employed. Suitable auger-holes are bored, in an upwardly-inclined direction, into the sash, as shown at fig. 6. Into such an aperture the plug *z* is introduced, carrying with it the knotted end of the cord. These plugs need not fit tightly in the holes in the sash, for their angular position, and the tension of the cords, will keep them securely in place.

Sometimes the slots *c c* are arranged in the direction of the length of the window, instead of transversely. When this method is employed, the strips are set into mortises adapted to receive their lower ends.

I am aware that removable strips have been before used in windows. Hence I do not claim such, broadly; but

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

In combination with the adjustable strip A, provided with studs *b b*, the slotted holding-plates *d d*, and eccentrics *e e*, as specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

E. W. GIDDINGS.

Witnesses:

E. W. ANDERSON,  
D. D. KANE.