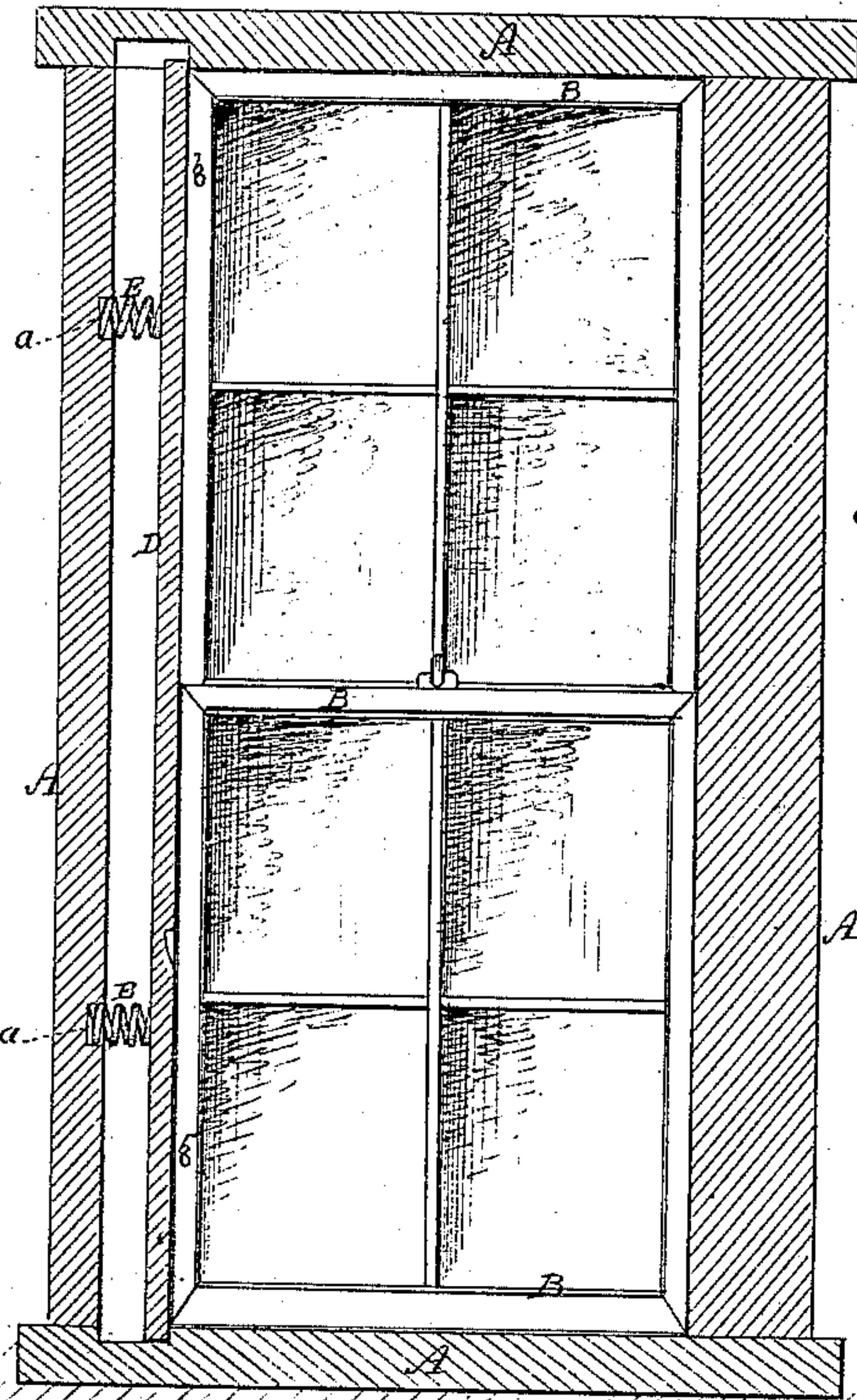


*A. W. Stine,*

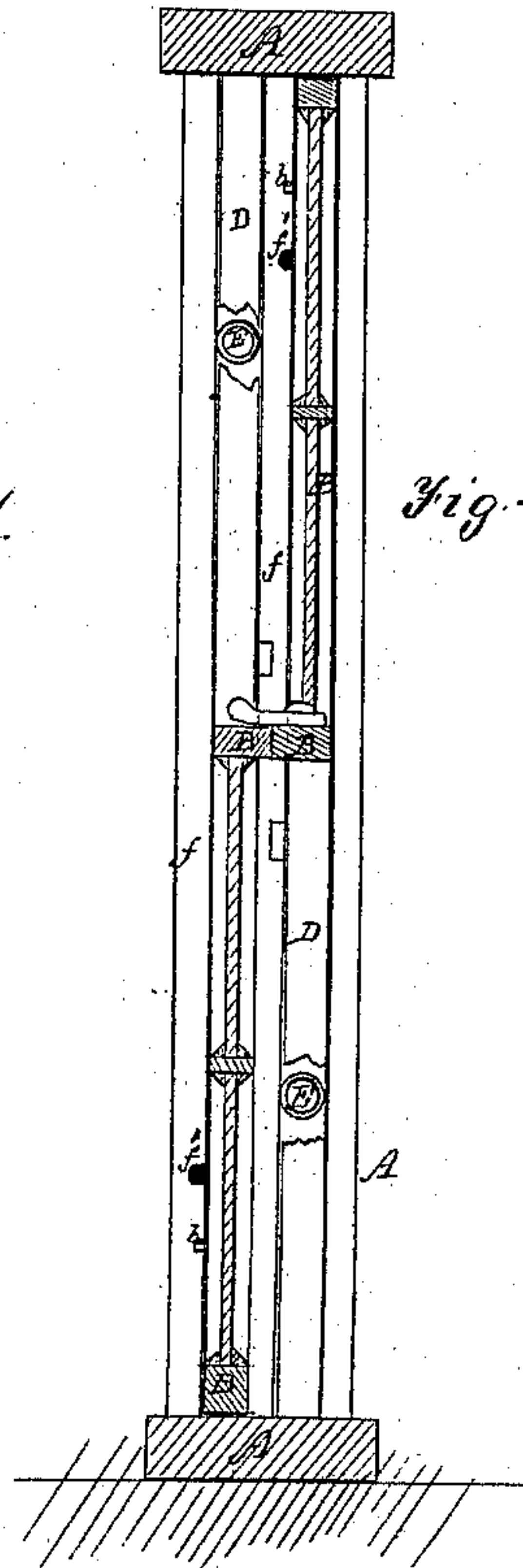
*Window Frame.*

*No. 106,634.*

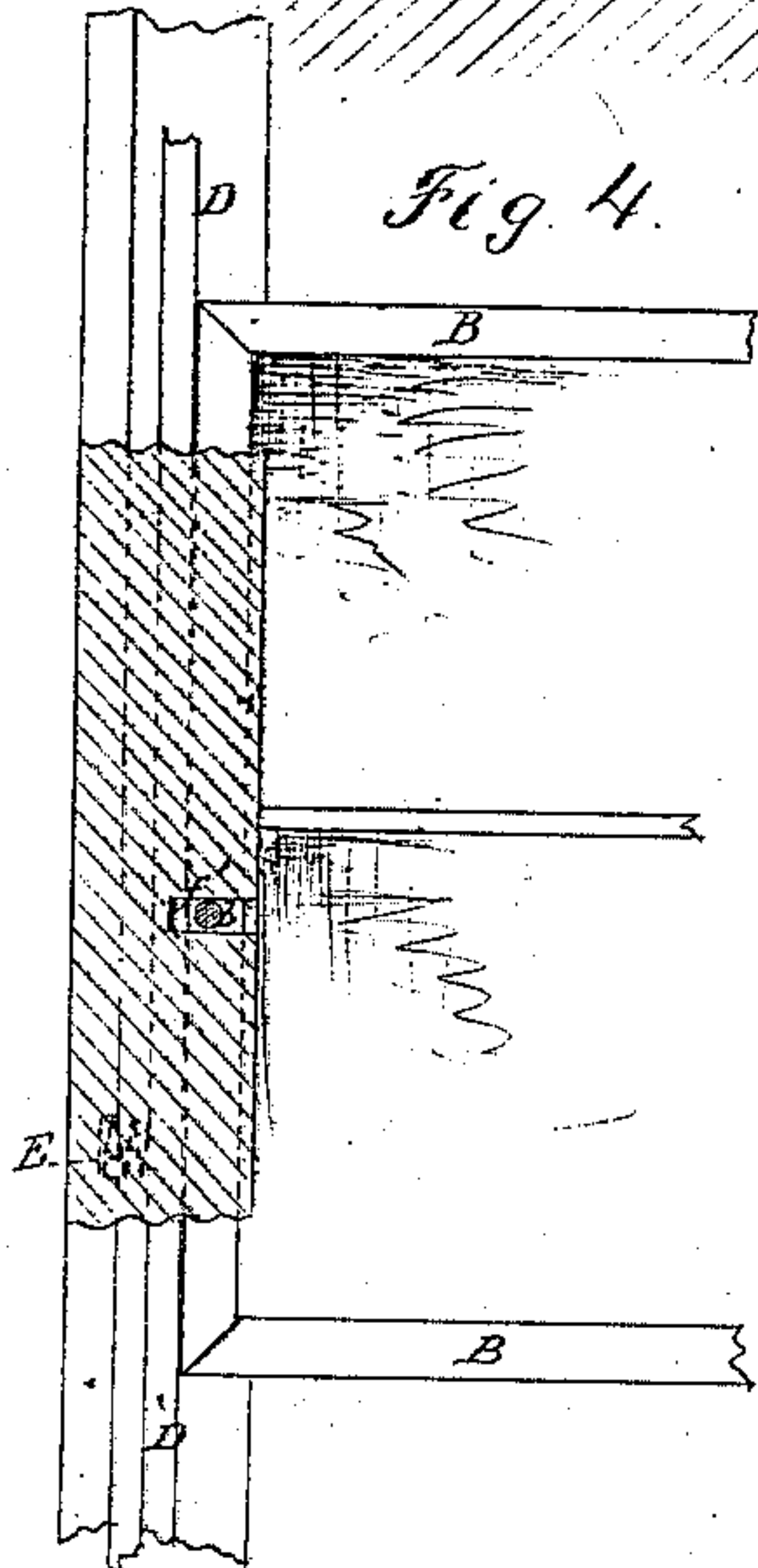
*Patented Aug 23. 1870.*



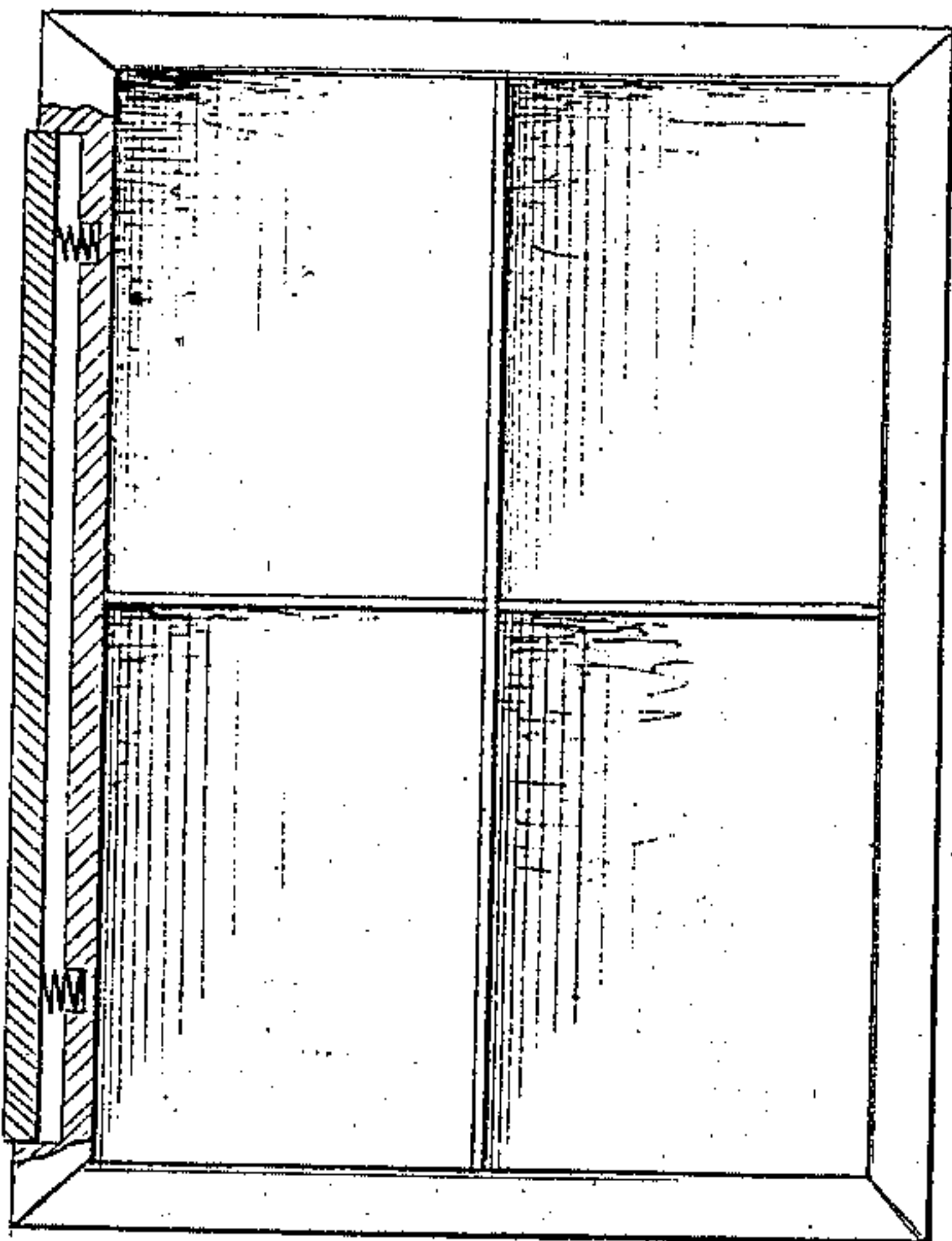
*Fig. 1.*



*Fig. 2.*



*Fig. 4.*



*Fig. 3.*

*Witnesses*  
*A. Ruppert.*  
*Ch. Clausen*

*Inventor.*  
*A. W. Stine*  
*per Edson Bros*  
*Atty.*



# UNITED STATES PATENT OFFICE.

ADAM W. STINE, OF CRESTLINE, OHIO.

## IMPROVEMENT IN WINDOW-FRAMES.

Specification forming part of Letters Patent No. **106,634**, dated August 23, 1870.

*To all whom it may concern:*

Be it known that I, ADAM W. STINE, of Crestline, in the county of Crawford and State of Ohio, have invented an Improved Window-Frame; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

### *Drawing.*

Figure 1 is a front elevation of my improved window-frame, partly in section. Fig. 2 is a transverse vertical section, and Fig. 3 is a front elevation, partly in section, of a modification of Fig. 1, showing the principle or mode of applying my improvement to a window-sash. Fig. 4 is a detached section of Fig. 2, the window-casing being partly in section.

This invention has for its object to construct a window frame and sash in such a manner as to perform the double service, to answer the purpose of a window-sash fastener, and also to enable the sash to be removed at once for the purpose of cleaning, all the parts of the frame remaining in their natural position; and to this end my invention consists in constructing a window-frame with its bearing against the sash made adjustable by means of a slat resting over spiral springs, an aperture in the jamb of the frame made to register with a pivot carried upon the sash, all of which will be hereinafter specifically designated and set forth in the following specification and claim.

Similar letters of reference represent identical parts in all of the figures.

In the annexed drawing, forming a part of this specification, A A is the window-frame; B B, the sash.

D is an intermediate slat, resting against spiral springs E E, made of requisite strength and durability. These springs are fitted into grooves *a a*, as shown in Fig. 1, for the purpose of keeping them in their natural and proper position. The slat D has its bearing against one side of the sash, and to such an extent as to support it at any point within the scope of its motion.

*f f* represent the usual strips or jambs,

which serve as guides for the sash. These strips have apertures *f' f'* to correspond and register with pivots *b b*.

In Fig. 4 is clearly shown the manner in which the sash is depressed for the purpose of removing it by the pivots *b b* entering the slot *f'* in the window-casing.

The operation may be stated as follows: As before stated, the sash will be held at any point where left. When it is desired to remove the sash it is only necessary to bring the pivots *b b* opposite to the apertures *f' f'*, when the sash may be pushed in against the adjustable slat D, thereby releasing the adjoining edge of the sash, when it may be removed. The slat D can be taken out by pushing it up and then pressing in the upper end. (See Fig. 1.)

Fig. 3 shows the manner of applying my improvement to windows already constructed. The springs are fitted into the sash, which has a longitudinal groove, precisely as they are in the window-frame, Fig. 1. A slat is then placed over the springs, which slat is made of such a thickness as to be partially retained within the said groove, and yet project far enough to allow the necessary play upon the springs to allow the sash to be pushed in and removed.

This makes almost a noiseless-moving sash, the constant action of the springs keeping the sash and frame in perfect parallel lines, whatever result may be produced by the action of the weather.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The combination, with the sash B B, provided with the pivots *b b*, of the strips *f f*, provided with slots *f' f'*, slats D D, and springs E E, substantially as shown and described.

In testimony whereof I have hereunto subscribed my name in the presence of two attesting witnesses this 9th day of May, 1870.

ADAM W. STINE.

Witnesses:

NATHAN JONES,  
HENRY HUBER.