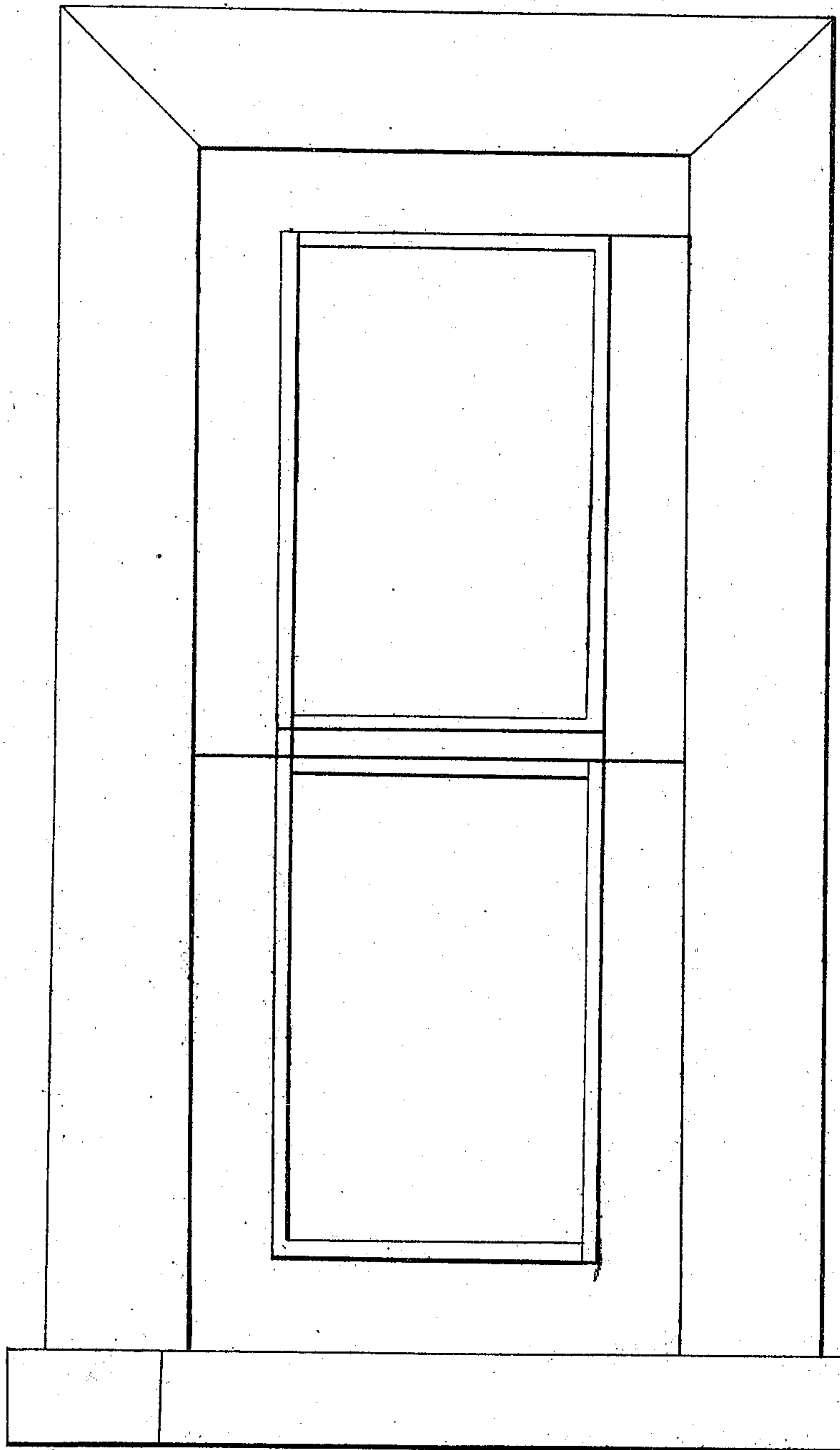
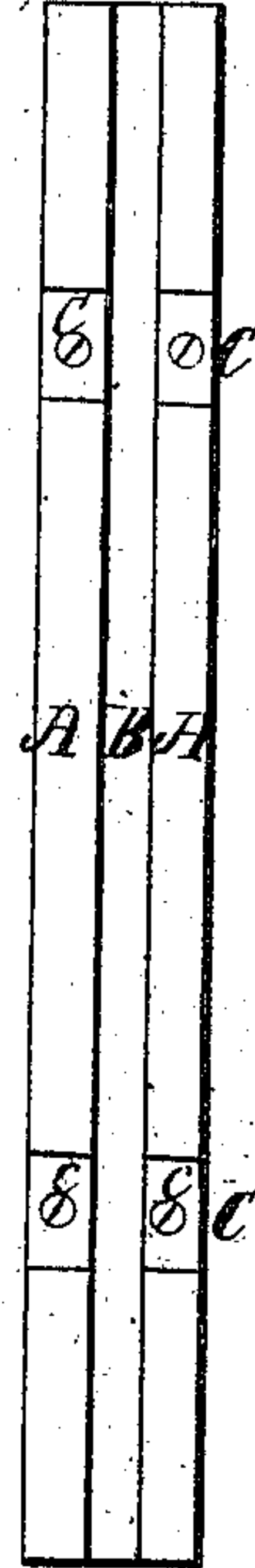


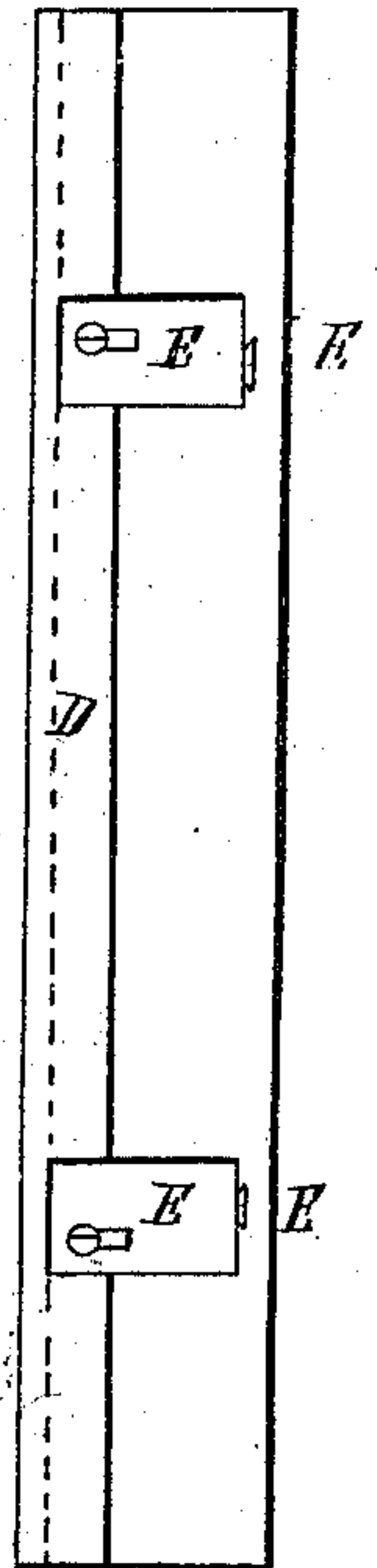
*O.C. Hill,*  
*Window Tightener,*  
*No 42,373,* *Patented Apr. 19, 1864.*



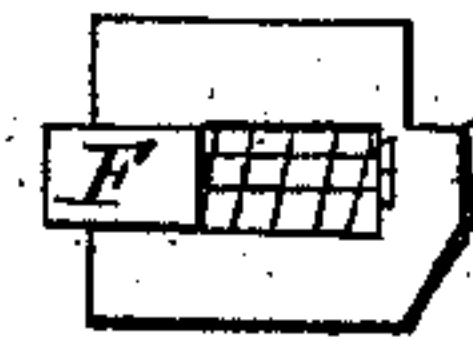
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*  
*H. P. Cantrell*  
*Allen Taylor*

*Inventor:*  
*Oros C. Hill*

# UNITED STATES PATENT OFFICE.

O. C. HILL, OF MALONE, NEW YORK.

## IMPROVED WINDOW-TIGHTENER.

Specification forming part of Letters Patent No. 42,373, dated April 19, 1864.

*To all whom it may concern:*

Be it known that I, ORVIS C. HILL, of the town of Malone, in the county of Franklin and State of New York, have invented a new and improved method of holding a strip placed in a groove in the edge of a window-sash for the purpose of tightening the window and supporting the sash when raised; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents the edge of the sash with the strip therein inserted. A is the edge of the sash. B is the strip, which should be made of hard wood, or some metal hard enough to insure durability. This strip is to be set into a groove sufficiently deep to receive it, which groove is cut along the center line of the edge of the sash. C is the face of the iron that holds the strip. This iron is secured to the edge of the sash with screws. There should be two of these irons on each strip—one near each extremity of the sash—or more, as the case may require. The strip runs the whole length of the sash.

Fig. 2 represents the side of the sash, the upper part of the sash being taken off down to the strip. D is the strip. E is the iron that holds it by having a slot in each side of the iron and a screw passing through it and through the strip, thus allowing the strip to be pressed back into the sash, while the screw will slide back and forth in the slot. By this means also the strip is kept firmly in its place as the sash is made to slide up and down. At the back end of the iron in the bow that passes around behind the strip is a screw which passes through the iron and through a spiral spring which is there interposed, and enters part way into the rear edge of the strip—that is, far enough to obtain a

firm hold therein, but no farther. This screw holds the spring fast in its place, and also holds the strip, preventing the same from going too far out.

Fig. 3 represents the iron and spring, with the screw passing through them into the strip. The strip itself in this figure is denoted by the letter F.

One or more strips may be used in a sash.

I do not claim in this application to be the inventor of the strip itself as employed in tightening a window and supporting the sash; but I claim and submit that I have invented a new and improved method of holding the strip when placed in the groove prepared for it. The method above described, and for which I seek to obtain a patent, makes the strip stronger than any other, and thus renders the use of the invention more permanent. In a former invention the head of the screw (which in the foregoing description is shown to pass through the spiral spring) is counter-sunk or embedded in the outer edge of the strip and about half-way deep, the point of the same entering the sash. This, it is obvious, must weaken the strip materially, and, through the raising and lowering of the sash, the same must be liable to become loose and the whole apparatus to be disordered.

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

The above described new and improved device for holding a strip placed in a groove in the edge of a window-sash for the purpose of tightening the window and supporting the sash when raised.

Dated February 1, 1864.

O. C. HILL.

Witnesses:

W. P. CANTWELL,  
U. D. MEEKER.