

(No Model.)

W. C. BULLIVANT.
WINDOW.

No. 318,164.

Patented May 19, 1885.

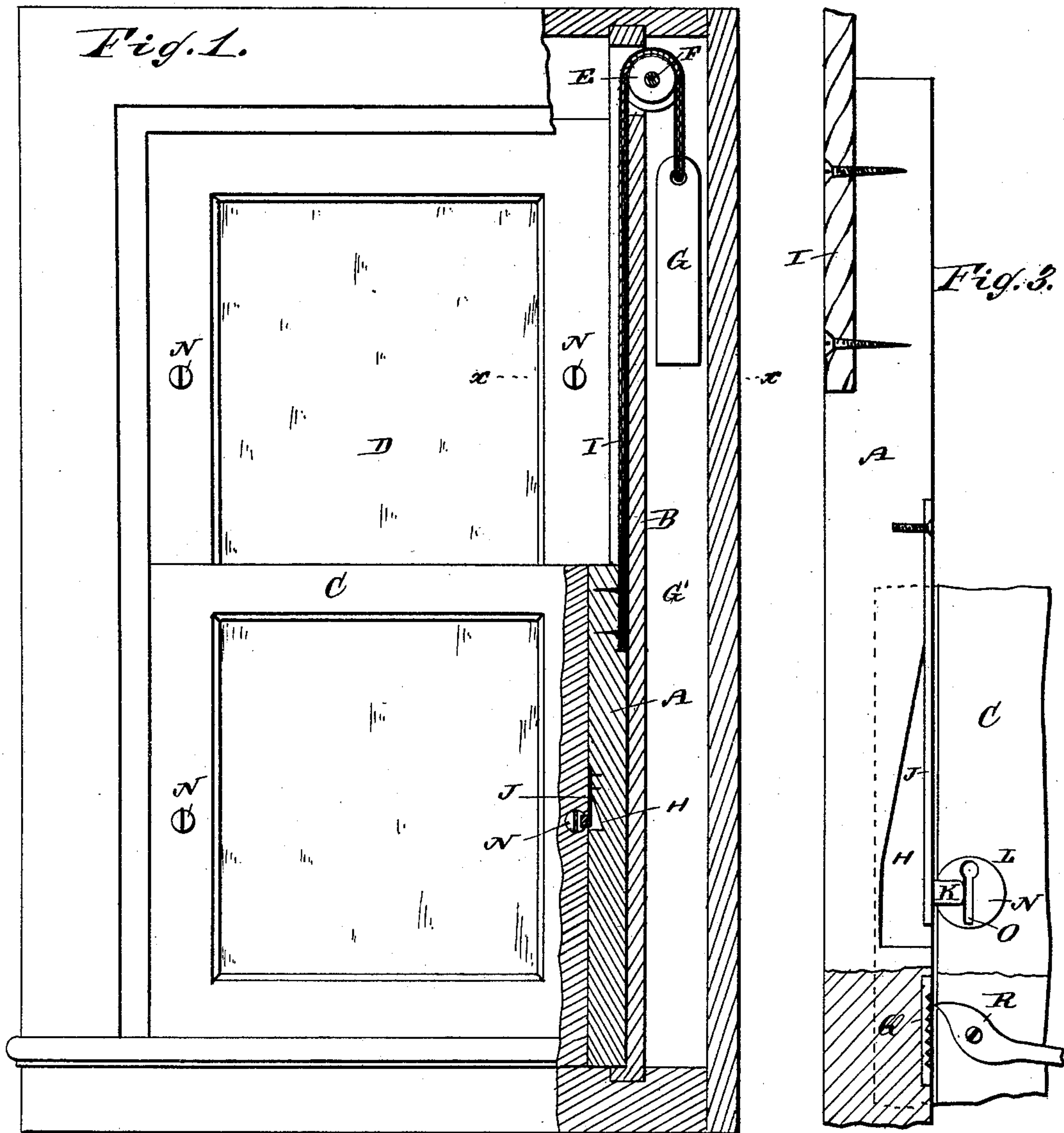
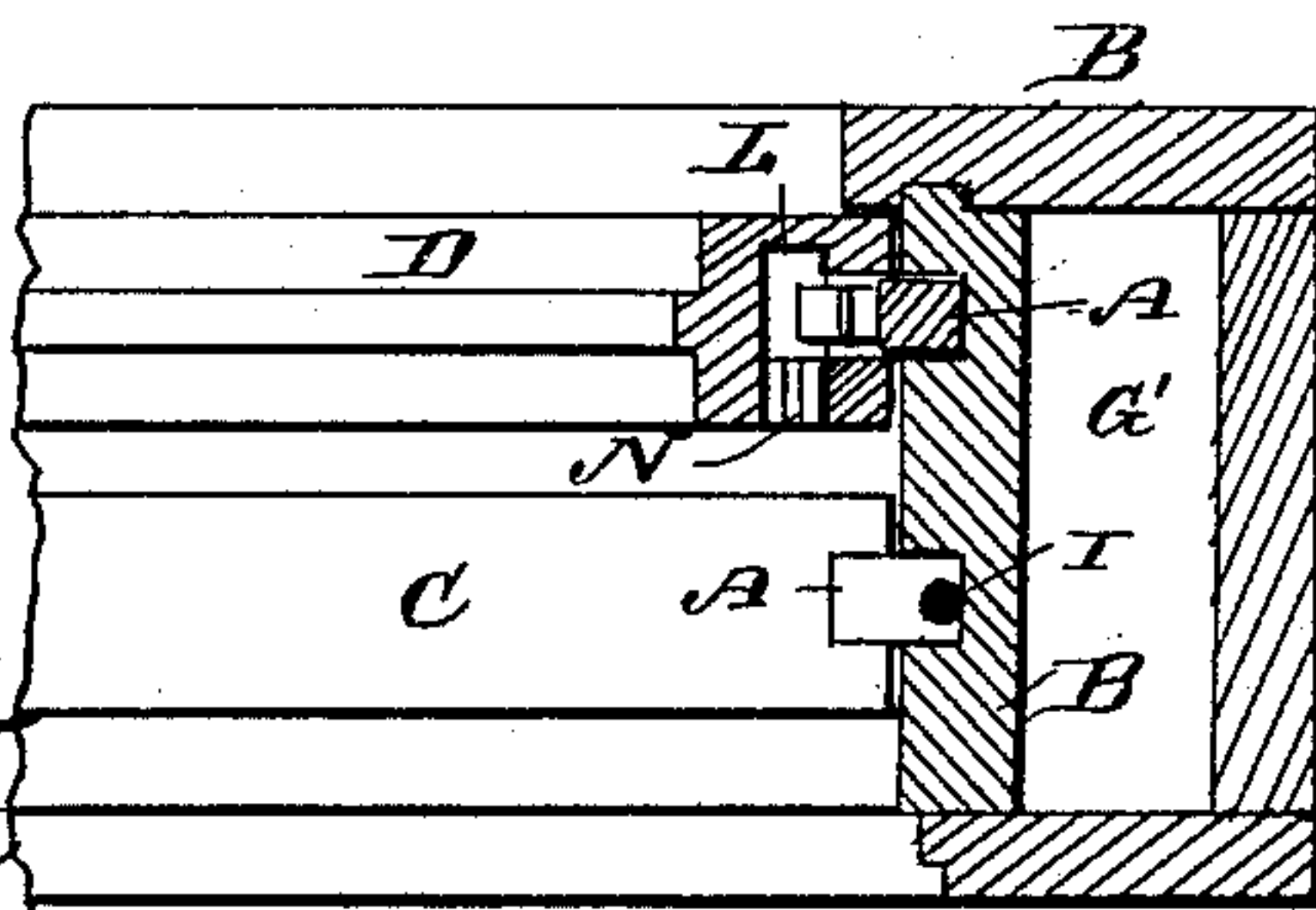


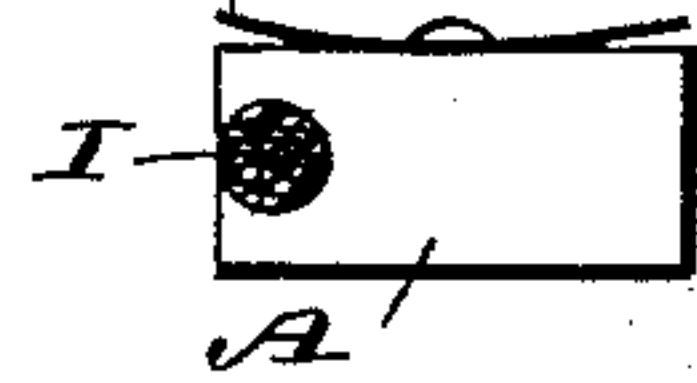
Fig. 2



WITNESSES:

Thos. G. Foster.
C. Sedgwick

Fig. 4.



INVENTOR:

W. C. Bullivant

BY

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM C. BULLIVANT, OF BOSTON, MASSACHUSETTS.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 318,164, dated May 19, 1885.

Application filed May 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. BULLIVANT, of Boston, Suffolk county, Massachusetts, have invented a new and useful Improvement in Windows, of which the following is a full, clear, and exact description.

The object of my invention is to provide certain new and useful improvements in the window for which United States Letters Patent No. 108,443 were issued to Thomas Bullivant on the 18th day of October, 1870.

The invention consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a face view of my improved window, parts being broken out and others shown in section. Fig. 2 is a sectional plan view of the same, parts being broken out. Fig. 3 is an enlarged detail view of the guide and the locking device, and Fig. 4 is a plan view of the guide-strip.

Guide-strips A are held to slide in grooves formed in the pulley-stiles of the frame B and in the centers of the corresponding side edges of the sashes C and D. The sash-cords I are secured to the outer edges of the said guides at the top and run over pulleys E, loosely mounted on a shaft, F, extending across the top of the boxing of the window-frame. The weights G are secured to the cords I, and move up and down in the boxes G'.

In the inner edge of each strip A a recess, H, is formed, which increases in depth in the direction from the top to the bottom, and at the top of the recess a spring-strip, J, is countersunk in the edge of the strip, and from the lower free end of the spring a prong, K, projects outward and into a transverse aperture, L, extending through the stile from the front to the rear, and a slot or opening extends from the apertures L to the inner face of the sashes, which slot or opening is adapted to receive the prong K. In the front of the aperture L a plug, N, is held, which is provided with a slot, O, for receiving a key. A spring weather-plate, P, is secured along its center on the outer or weather surface of the guide A the entire height of the same, the edges of the plate P being a short distance from the strip

A. The said spring-plate P forms a flexible weather-plate and presses the guide against the sides of the grooves in the sash and frame, thus forming close and tight joints. If weights are not provided, a serrated plate, Q, is secured in the surface of the guide, and a lever, R, adapted to engage with it, passes through a slot in the side bar of the sash and is pivoted to it. The said lever presses the guide into the groove in the stile to retain the sash in any position desired. When the sash is to be removed, a key is passed through the slot O in the plug N, and is then turned to press the prong K out of the aperture L. The weight G then pulls the corresponding guide upward and out of the sash. When the sash is to be secured on the guide, the sash is placed on the frame and the guide is pressed down and presses back the prong K until the same is opposite the apertures, when it snaps into the same, thus locking the sash on the guide.

I do not limit myself to any special construction of the spring, latch, or catch for holding the sash on the guide, but may use any suitable analogous device, or the spring part can be used on the sash with the catch on the guide, or a push-pin surrounded by a spiral pin and passing through the side of the sash, or another latch may be used.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—
1. The combination, with a vertically-sliding guide, A, held in grooves in the end of the sash and frame, of the spring-plate P, secured to one side of the guide, and a spring-latch for holding the sash on the guide, substantially as herein shown and described.

2. The combination, with the grooved frame B and the recessed and apertured sash C, of the guide A, having the recess H, spring-strip J, secured to the guide, and provided with the prong K, and the plug N, having the slot O, substantially as herein shown and described.

3. The combination, with the vertically-sliding guide A, of the serrated plate Q on the same, the sash C, the latch-lever R, pivoted in the same, and a spring-catch for holding the sash on the guide, substantially as herein shown and described.

WILLIAM C. BULLIVANT.

Witnesses:

FRED S. BLAKE,
GEO. W. CLARK.