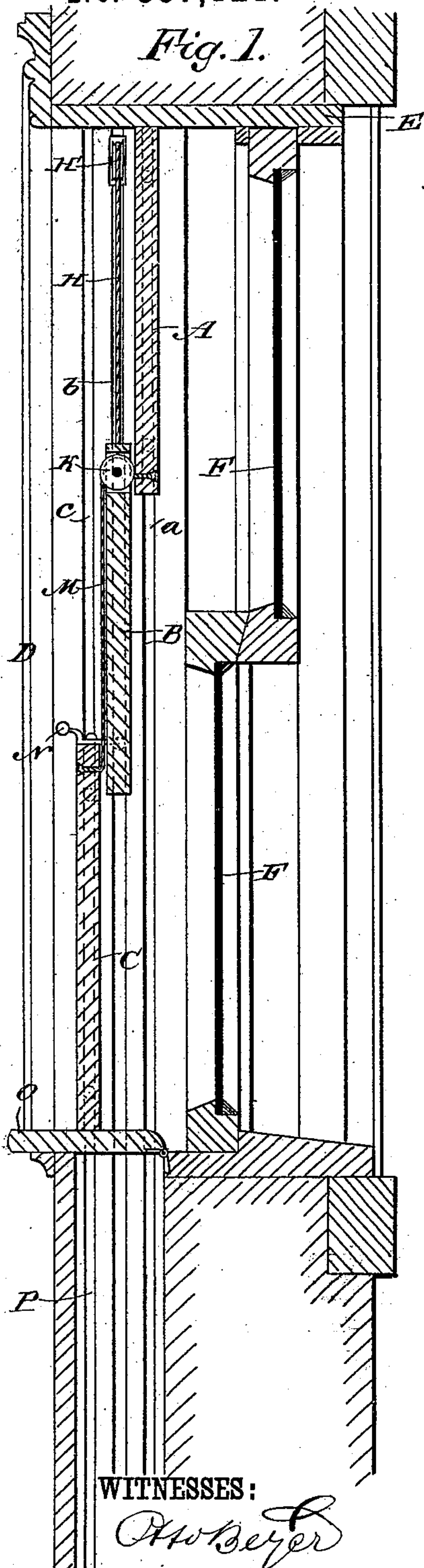


(No Model.)

R. BLAIR.
INSIDE SHUTTER.

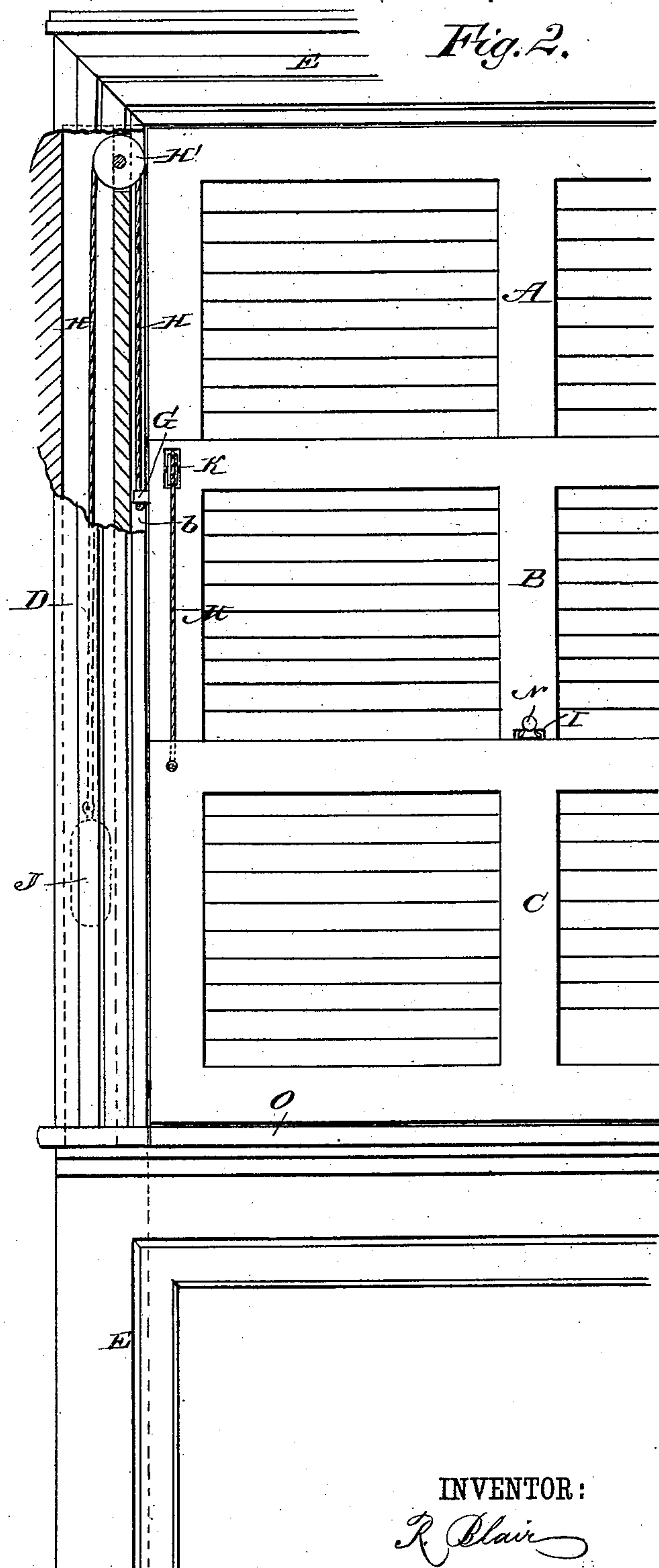
No. 337,121.

Patented Mar. 2, 1886.



WITNESSES:

Wm Beyer
C Sedgwick



INVENTOR:

R. Blair

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT BLAIR, OF NEW YORK, N. Y.

INSIDE SHUTTER.

SPECIFICATION forming part of Letters Patent No. 337,121, dated March 2, 1886.

Application filed September 8, 1885. Serial No. 176,487. (No model.)

To all whom it may concern:

Be it known that I, ROBERT BLAIR, of the city, county, and State of New York, have invented new and useful Improvements in Inside Shutters, of which the following is a full, clear, and exact description.

This invention relates to certain new and useful improvements in shutters or blinds for windows; and the object of my invention is to facilitate the working of the shutters and to have them entirely out of the way when not in use.

The invention consists in the construction of parts and details and combinations of the same, as will be fully described and set forth hereinafter, and then 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 both figures.

Figure 1 is a cross-sectional elevation of a window provided with my improved inside blinds; and Fig. 2 is a face view of the same, parts being broken out and others shown in section.

The shutters or blinds are formed of three sections, A, B, and C, each sliding in its separate and distinct grooves *a*, *b*, and *c*, respectively, in the inner sides of the uprights D of the window-frame E, the said guide-grooves being inside of the sashes F. The central section, B, has lugs G on its side edges, near the top of the same, and to said lugs sash cords or ropes H are secured, the said ropes passing over pulleys H' in the window-frame, at the top. Balancing-weights J are secured to the outer ends of said ropes, and slide up and down in boxes in the window-frame, in the usual manner. Pulleys K are journaled in slots in the upper corners of the central section, B, and over said pulleys cords or ropes M are passed, each having one end secured to an upper corner of the lower section, C, and the other end to a lower corner of the upper section, A. A latch, N, is pivoted to the upper edge of the lower section, C, and its end can be passed into an aperture, I, in the inner surface of the central section, B, at the top of the same. The sill

O is hinged, as shown in Fig. 1, and below the said hinged sill a cavity, box, or recess, P, is formed in the window-frame for receiving the three sections A B C. When the lower section, C, is raised, the upper section, A, is lowered, as the same are connected by the cords and pulleys in the manner set forth. The upper and lower sections can be adjusted to be in front and behind the central section, and then all three sections can be moved up and down together. When the sections are adjusted to fill the entire window-frame, as shown in Fig. 2, they can be locked by turning the latch N in such a manner that its inner end passes into the aperture I. The three sections can be pushed down into the cavity or box P and then covered by the hinged sill, and are thus out of the way.

The sections may be made solid or with slats.

The blinds can be adjusted very easily to cover a greater or less part of the sashes.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the three blind-sections A, B, and C, of the ropes H, secured to the central section, B, and passed over pulleys H' in the window-frame, the weight J, secured to the ropes, and cords secured to the upper and lower sections and passed over pulleys on the central section, substantially as herein shown and described.

2. The combination, with the three blind-sections A, B, and C, of the ropes H, secured to the central section and passed over pulleys H' in the window-frame, weights J, secured to the said ropes, and the cords M, secured to the lower corners of the upper section, A, and to the upper corners of the lower section and passed over pulleys K, journaled in the upper corners of the central section, B, substantially as herein shown and described.

3. The combination, with the three sections A, B, and C, of cords secured to the upper and lower sections and passed over pulleys on the central section, weighted ropes connected with the central section and passed over pulleys in the window-frame, and a latch pivoted on the upper edge of the lower section, the central section having a recess or ap-

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erture into which the end of the latch can be passed, substantially as herein shown and described.

4. The combination, with the window-
5 frame E, having the cavity or box P under the sill and having said sill hinged, of the three blind-sections A, B, and C, the cords M,

the pulleys K, the ropes H, the pulleys H', and the weights J, substantially as herein shown and described.

ROBERT BLAIR.

Witnesses:

JOHN J. COTTER,
W. J. O'BRIEN.