

F. A. Reiler.

Window Shutter.

No. 84,068.

Patented Nov. 17, 1868.

Fig. 1

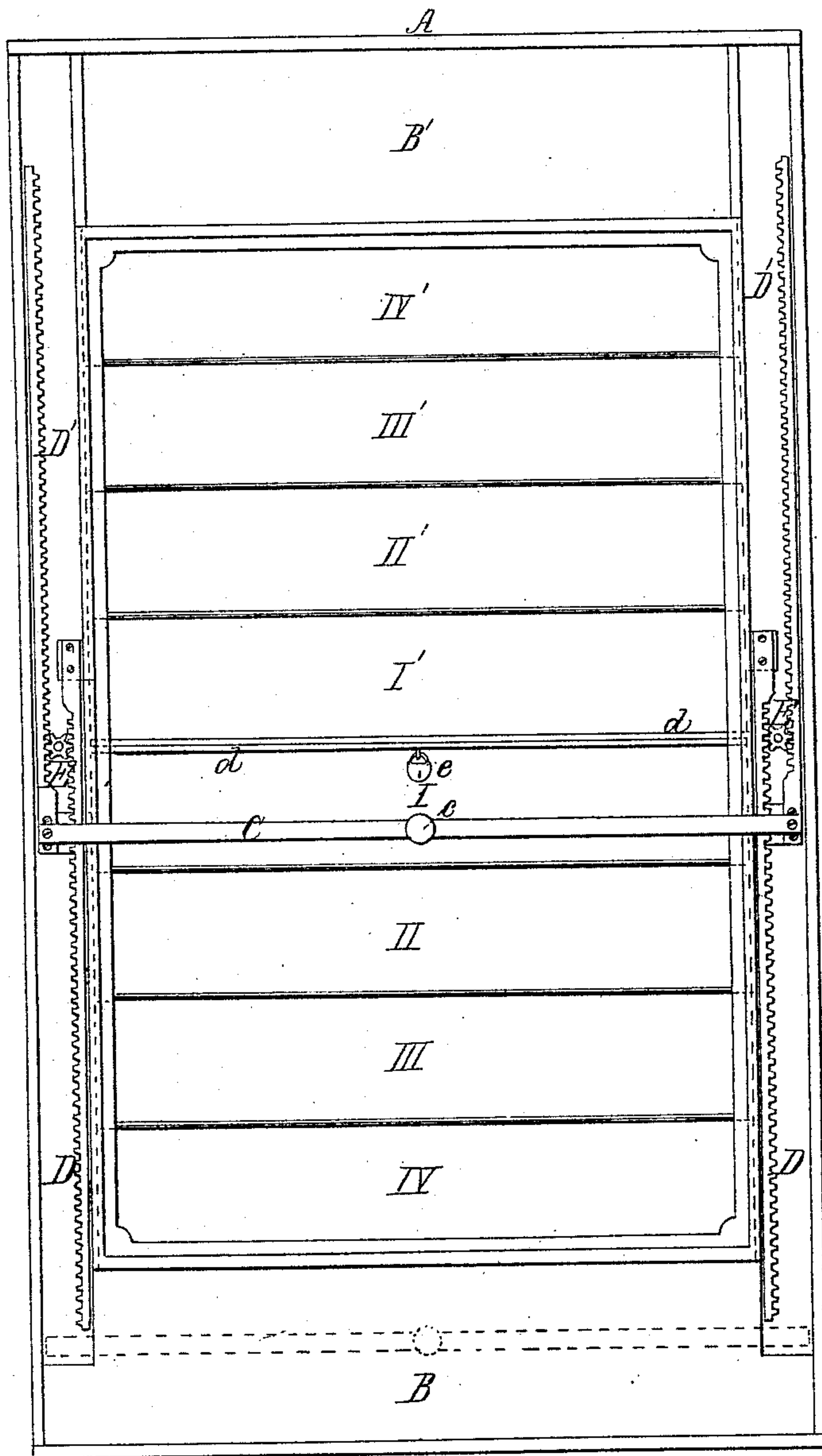
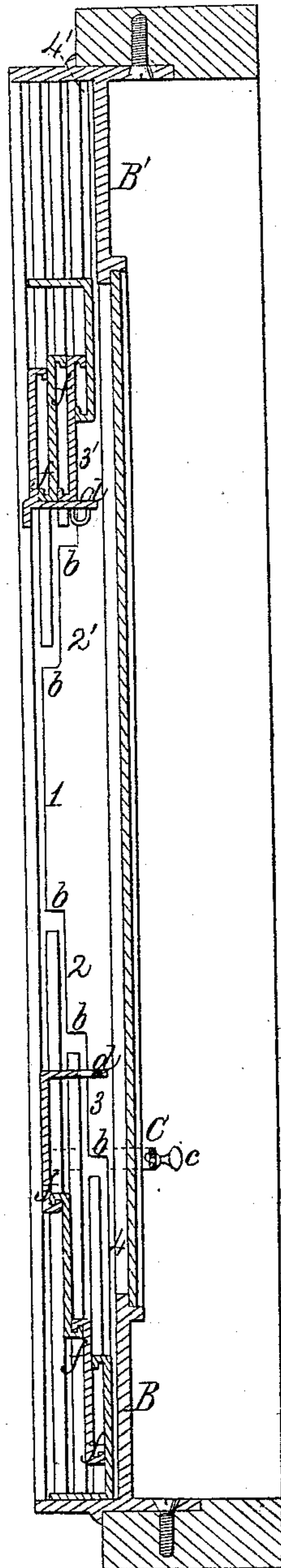


Fig. 2



Witnesses:
Jos. H. Gayman.
A. G. Webber.

Inventor

F. A. Reiler
By Knight Bros. & Co.



FRANK A. REIHER, OF CINCINNATI, OHIO, ASSIGNOR TO FRANK A. REIHER AND COMPANY.

Letters Patent No. 84,068, dated November 17, 1868.

IMPROVED WINDOW-SHUTTER.

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

To whom it may concern:

Be it known that I, FRANK A. REIHER, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Window-Shutter; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a form of window-shutter composed of a series of slats, adapted to be simultaneously opened, or closed compactly together, so as to be entirely out of sight.

In the accompanying drawings—

Figure 1 is a rear or in-door view of a window, provided with my improvement.

Figure 2 is a vertical section thereof.

A represents a window-frame, provided with housings or pockets B B' for the lower and upper sets of slats, respectively, and, opening into said pockets, a series of vertical grooves, of which one groove on each side of the frame 1 extends the entire height of the window, while the others, 2 2', 3 3', 4 4', extend varying distances upward and downward, respectively, as represented.

I II III IV and I' II' III' IV' are, respectively, the upper and lower slats, (preferably of sheet-metal,) adapted to slide in the aforesaid grooves as far as the shoulders b thereof.

C is a bar, whose ends, being secured to those of the upper slat I of the lower series, and having one or more knobs or handles, c, enable the elevation or depression of the said slat.

The meeting edges of the slats I and I' have flanges d, which serve, in the folded or housed condition of the slats, to neatly and securely close the pockets, and which, in the extended condition, (see fig. 1,) serve to receive or hold padlocks e or other fastenings. The flange of the slat I' also serves to support slats above it, in opening or closing the shutter. (Fig. 2.)

All the other meeting edges are provided with lips f, which, engaging with each other in the extended position of the shutter, afford a continuous metallic screen or covering to the window. (See fig. 1.)

Each slat I and I' has at each end of it a rack, D D', which racks engage on opposite sides of a pinion, E, one on each side of the window.

By this means, any elevation or depression of the slat I is accompanied by a corresponding, but opposite, motion of the slat I', and these slats act, by their respective lips, to move in succession until either all or a part are operated upon, according as it is desired to wholly or partially open or close the shutter.

I claim herein as new, and of my invention—

The arrangement of the two series of lipped or flanged slats I II III IV, I' II' III' IV', racks D D', pinions E, and guiding-grooves 1, 2, 3, 4, 1', 2', 3', 4', substantially as set forth.

In testimony of which invention, I hereunto set my hand.

FRANK A. REIHER.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.