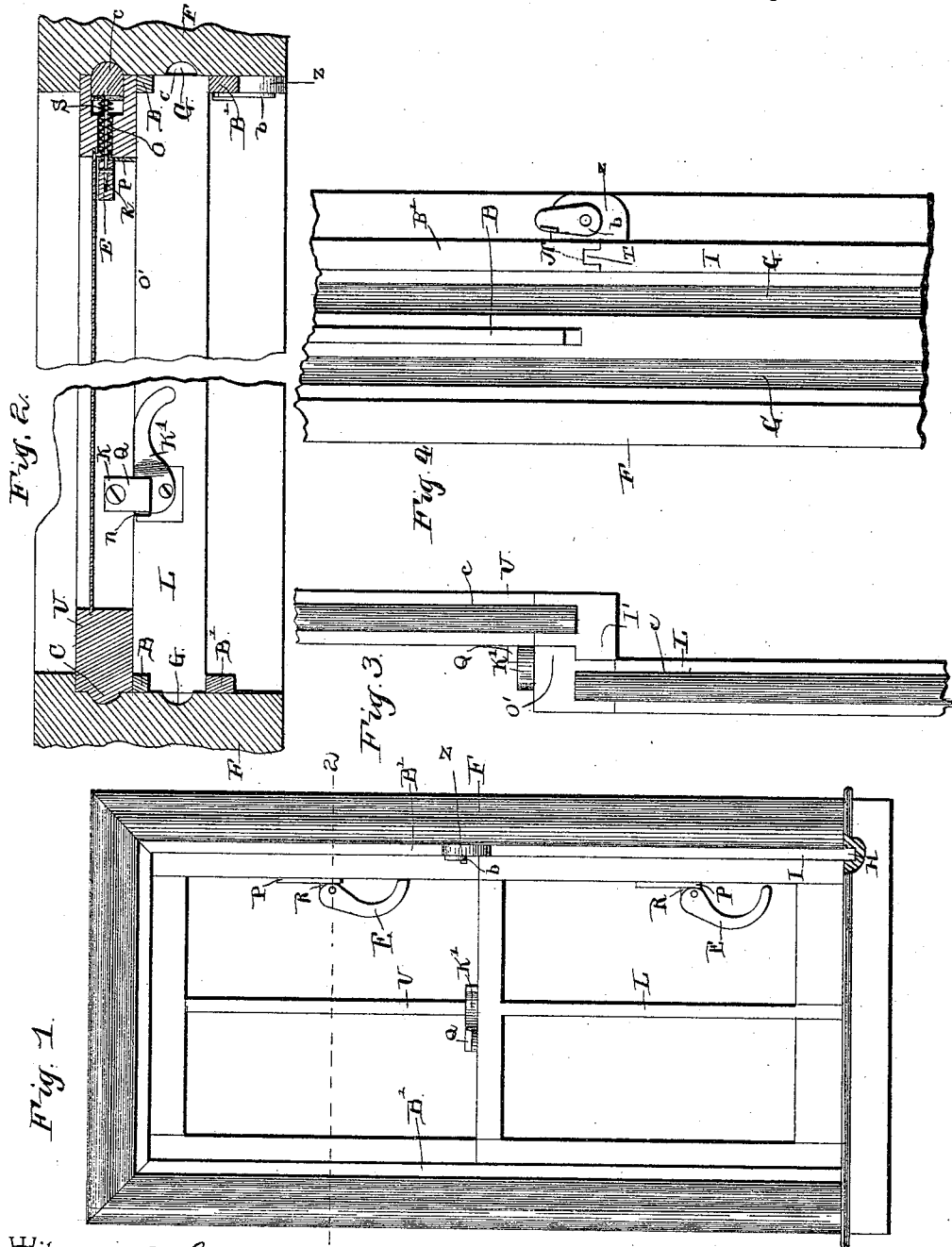


(No Model.)

V. R. KOONTZ.
WINDOW FRAME.

No. 451,826.

Patented May 5, 1891.



Witnesses
H. G. Seitz.

M. L. Gollamer

Victor R. Koontz, Jr.

Inventor

By his Attorneys,

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UNITED STATES PATENT OFFICE.

VICTOR R. KOONTZ, OF WAYNESBOROUGH, PENNSYLVANIA.

WINDOW-FRAME.

SPECIFICATION forming part of Letters Patent No. 451,826, dated May 5, 1891.

Application filed August 29, 1890. Serial No. 363,438. (No model.)

To all whom it may concern:

Be it known that I, VICTOR R. KOONTZ, a citizen of the United States, residing at Waynesborough, in the county of Franklin and State of Pennsylvania, have invented a new and useful Window-Frame, of which the following is a specification.

This invention relates to window-fasteners; and the object of the same is to provide improved means for holding the sashes of a window in place in the window-frame, yet permitting their removal therefrom.

To this end the invention consists in the specific details of construction hereinafter more fully described and claimed, and as illustrated in the drawings, in which—

Figure 1 is an inside elevation of a window-frame with the two sashes in place. Fig. 2 is a horizontal section on the line 2 2 of Fig. 1. Fig. 3 is an elevation from the right side of the two sashes as removed from the frame and as in their proper relative position. Fig. 4 is an elevation of the right-hand side of the frame, taken from the inside.

Referring to the said drawings, the letter F designates a window-frame wherein slides the upper sash U and the lower sash L. The said window-frame is provided on its inner side faces with semicircular vertical grooves G, between which are the usual beads B, and in these grooves, between the beads B and B', slide the sashes in a well-known manner. The lowermost half I of the front bead B' at one side (in the present case, the right side) of the window-frame is stepped in a hole H in the sill of the frame, and its upper end has a tongue T engaging a notch N in the fixed upper half of this bead, and after this portion of the bead is put in place a button b, pivoted to a block Z, secured to the frame, is turned so as to cover the tongue T and hold the removable piece of beading in position. The bodies of the sashes are of the same width as the distance between the inner faces of the frame F. In their left edges is fixedly seated (or, as shown, integrally formed therewith) a semicylindrical strip C, which slides in the grooves G at that side of the frame, and in the right edge of each is seated a similar strip c, pressed normally outward by a coiled spring S passing through a hole O in the side of the sash and bearing at its inner

end against a plate P, screwed to the inner edge of the sash, as will be understood. To the movable strip c is connected a rod R, which passes loosely through the spring S and through a hole in the plate P, and to the inner end of this rod is pivoted an eccentric catch E, as best seen in Fig. 1.

The upper edge of the lower sash L is provided with an outwardly-extending bead O', and the lower edge of the upper sash with a similar inwardly-extending bead I', and when the two sashes are in their proper positions these beads overlap each other and close the opening between the adjacent bars of the sashes. In the bead O' is a notch n, through which passes the tongue Q of a catch K, secured to the lower bar of the upper sash U, and the complementary member K' of this catch is secured to the upper bar of the lower sash L and is adapted to engage the tongue K when both sashes are closed.

With the above construction of parts the sashes slide vertically and are locked in the frame in the ordinary manner. When it is desired to remove the lower sash from the frame, the button b is first turned so as to release the tongue T of the removable bead I from the notch N. This bead is then lifted out of the hole H and entirely removed from the frame F. The eccentric E of the lower sash is then operated to draw upon the rod R and draw the movable strip c inwardly, after which the right edge of the lower sash can be drawn into the room and the entire sash taken from the frame. To remove the upper sash U, the same is dropped against the sill and a similar operation gone through with. Both sashes may be replaced by reversing the operation.

What is claimed as new is—

1. The combination, with the frame F, having the vertical grooves G in its inner faces, the beads B between said grooves, the front bead B' forward of the front grooves, the upper half of one front bead being stationary and having a notch N at its lower end and the sill having a hole H, the removable front bead I, its lower end seated in said hole and its upper end having a tongue T engaging said notch, and the button b, pivotally mounted onto the frame and turning over said tongue, of the upper and lower sashes, each having a

fixed strip C at one side and a movable strip
c at the other side, the strips engaging said
grooves, and means for drawing the movable
strips inwardly, as and for the purpose set
5 forth.

2. The combination, with the frame F, hav-
ing the vertical grooves G in its inner faces,
and the beads B between said grooves, the
front bead B' forward of the front grooves,
10 the lower half I of one of the front beads be-
ing removable, of the upper and lower sashes,
each having a fixed strip C at one side and

a movable strip c at the other side, the strips
engaging said grooves, and means for draw-
ing the movable strips inwardly, as and for 15
the purpose set forth.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
presence of two witnesses.

VICTOR R. KOONTZ.

Witnesses:

FRANK E. GROVE,
S. W. CUNNINGHAM.