

(No Model.)

J. ENDRES.
WINDOW.

No. 549,908.

Patented Nov. 19, 1895.

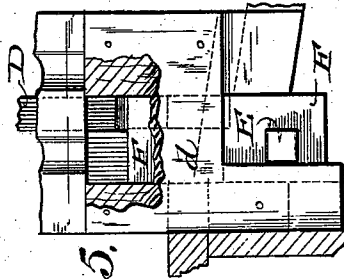
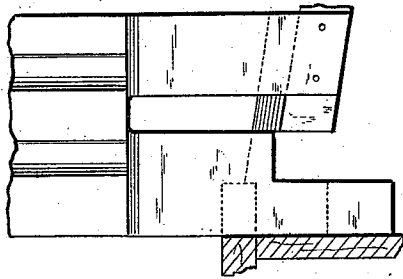


Fig. 1.

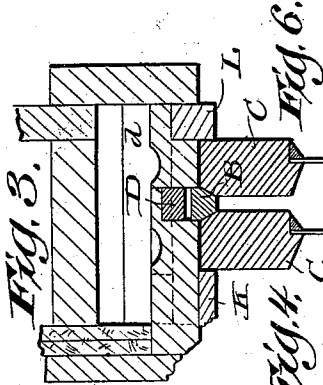
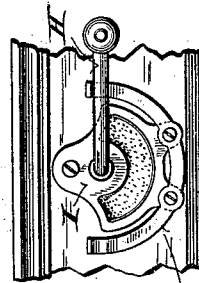


Fig. 4.

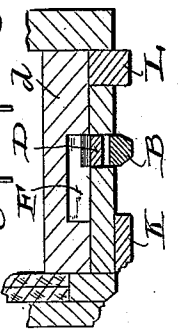
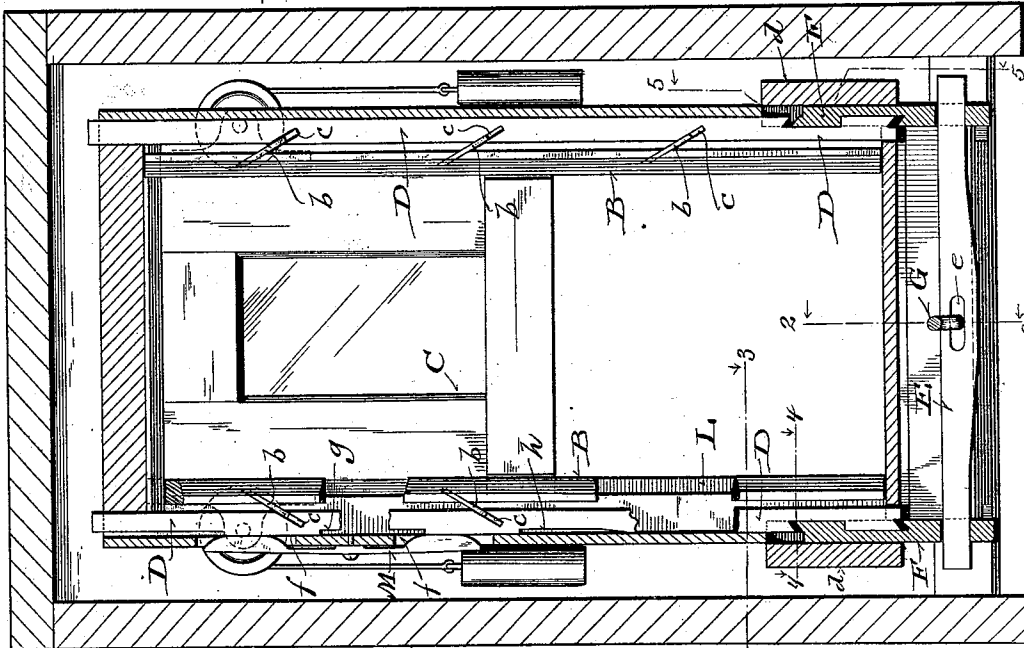
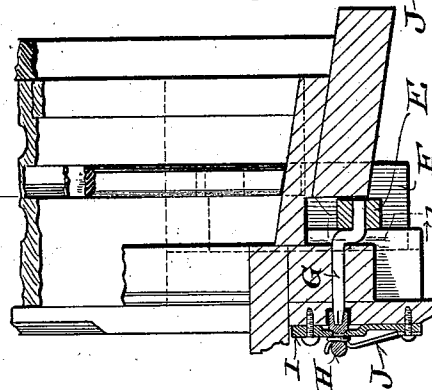


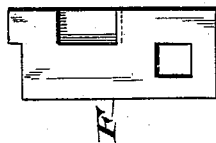
Fig. 5.



Witnessed:
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Fig. 1.

Fig. 8.



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UNITED STATES PATENT OFFICE.

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WINDOW.

SPECIFICATION forming part of Letters Patent No. 549,908, dated November 19, 1895.

Application filed March 5, 1895. Serial No. 540,632. (No model.)

To all whom it may concern:

Be it known that I, JOHN ENDRES, a citizen of the United States, and a resident of South Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Windows; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to utilize the parting-stops of window-frames as means to prevent rattle of the sash; and it consists in certain peculiarities of construction and combination of parts hereinafter set forth, with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a window-frame embodying my improvements as viewed on the plane indicated by line 1 1 in the succeeding figure and having certain of the parts broken away; Figs. 2, 3, 4, and 5, detail sectional views respectively taken on lines 2 2, 3 3, 4 4, and 5 5 of Fig. 1; Fig. 6, a view similar to the preceding figure, except that certain of the parts are removed; Fig. 7, a detail elevation illustrating certain devices comprehended in my invention, and Fig. 8 a similar view of a link that is also comprehended in said invention.

Referring by letter to the drawings, A represents a window-frame of ordinary construction, except in the matter of the parting-stops B and other details hereinafter set forth. According to my invention the parting-stops are movable instead of stationary in the adjacent jambs, and the movement is such that a lateral adjustment of said parting-stops is had to bring them in or out of clamping contact with the sash C of the window. It is also to be observed that the opposing surfaces of the sash-stiles and parting-stops are beveled. Each parting-stop is provided with oblique wings *b*, that engage corresponding kerfs *c* in vertical staves D, the latter being loose in the jambs of the window-frame. In order that the staves D may be moved up or down to effect a lateral adjustment of the parting-stops incidental to the oblique wing-and-kerf connections above specified, I connect said staves with a horizontal crank-actuated bar E, the connection being preferably in the form

of link-plates F, such as are best illustrated in Figs. 1 and 8.

Inasmuch as the staves D are preferably of wood and necessarily somewhat fragile, the employment of the broad link-plates F, working against guide-blocks *d*, strengthens the connection of said staves and adjusting-bar, each link being in mortise-and-tenon joint with a staff and provided with an eye engaged by said adjusting-bar.

The adjusting-bar E has a central longitudinal slot *e*, engaged by the outer end of a crank-rod G, that has its bearing in the lower portion of the window-frame, and while this crank-rod may be in one piece with its handle H, I prefer to make the latter separate and provide it with a squared socket end for the reception of a correspondingly-shaped inner end of said rod, as shown in Fig. 2. I also find it preferable to have the handle portion of the crank-rod turn in a plate I, secured to the inside casing of the window-frame, and to provide this plate with a semicircular spring-plate J, having recessed extremities, with which said handle portion of the crank-rod may be engaged to hold it in adjusted position.

If the crank-rod be operated in one direction, the staves D will be lowered, and by their downward pressure on the wings *b* of the parting-stops B the latter are forced toward each other to wedge against the sash C and bind the same tight against the other stops K L on the window-frame. An operation of the crank-rod in the opposite direction causes an upward pressure on the wings of the parting-stops, and thereby the latter are retracted to loosen the sash.

As herein shown, I prefer to employ a spring M, arranged to have its extremities extend through openings *f* in a jamb of the window-frame and impinge against one of the staves D above specified, the spring bearing edge of this staff being provided with notches *g h* of suitable length and depth. The staff-notch *g* comes into register with that portion of the adjacent jamb intermediate of the openings *f* engaged by the extremities of the spring M, and the other staff-notch *h* having cleared the lower jamb-opening said staff and its companion parting-stop may be sprung back to

clear the sash when it is desirable to remove or set the same.

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

1. A window-frame provided with loose parting-stops having oblique wings, and vertically reciprocative staves having oblique notches engaged by the parting-stop wings.
2. A window-frame provided with loose parting-stops having oblique wings, loose staves having oblique notches engaged by the parting-stop wings, and a crank-controlled adjusting bar in connection with said staves.
3. A window-frame provided with loose parting-stops having oblique wings, loose staves having oblique notches engaged by the parting-stop wings, a crank-controlled adjusting-bar, and links connecting the staves and bar.
4. A window-frame provided with loose parting-stops having oblique wings, loose staves having oblique notches engaged by the parting-stop wings, a slotted adjusting bar in

connection with the staves, a crank-rod engaging the bar-slot, and a semi-circular spring that has recessed extremities and opposes the handle portion of the crank-rod.

5. A window-frame provided with loose parting-stops having oblique wings, vertically reciprocative staves having oblique notches engaged by the parting-stop wings, and a spring arranged to have extremities thereof extend through openings in a jamb of said frame to impinge against a notched bearing edge of one of the staves.

6. A window-frame in which a loose parting-stop having oblique wings is combined with a reciprocative staff having oblique notches engaged by said wings.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

JOHN ENDRES.

Witnesses:

N. E. OLIPHANT,
HENRY DANKERT.