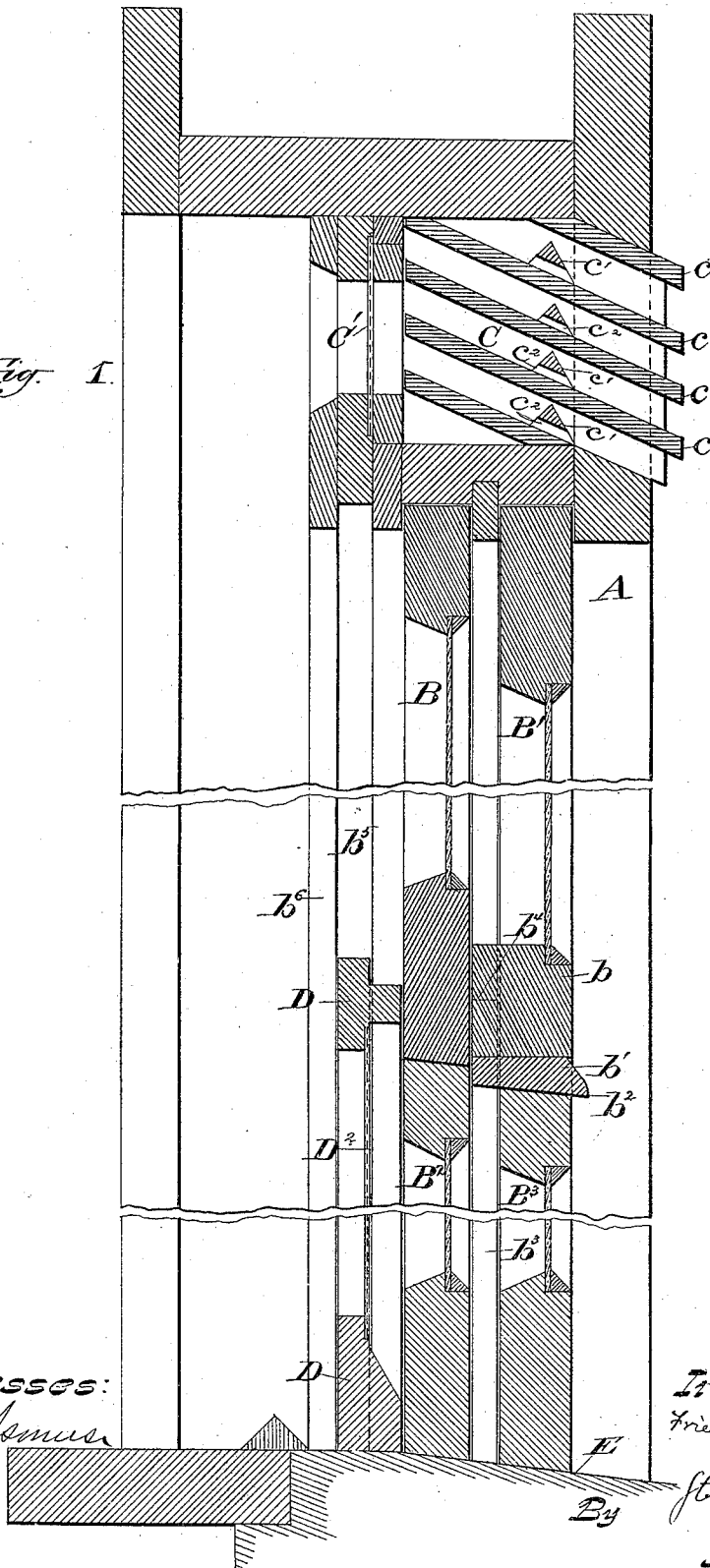


F. KELLER.
WINDOW.

No. 314,683.

Patented Mar. 31, 1885.

Fig. 1.



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Fig. 2.

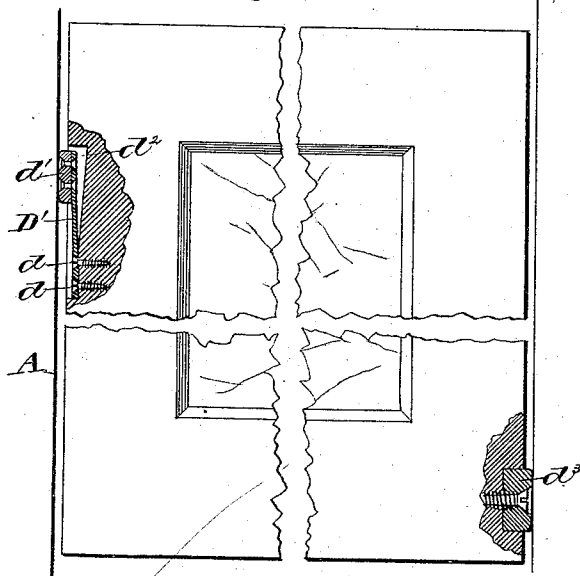


Fig. 3.

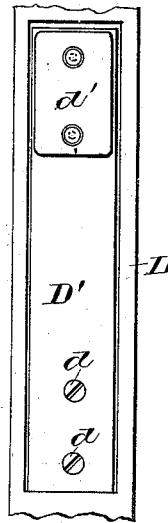


Fig. 4.

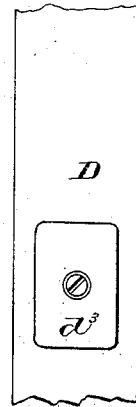
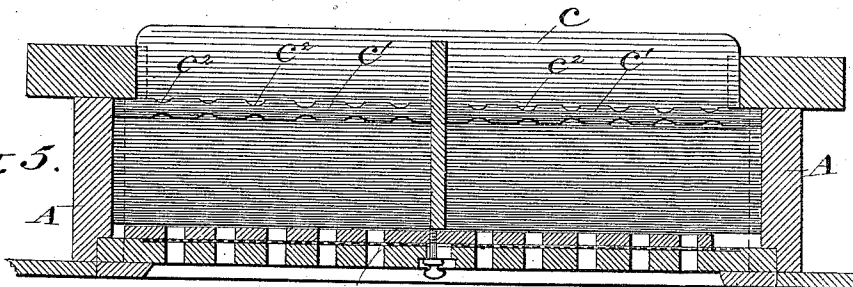


Fig. 5.



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UNITED STATES PATENT OFFICE.

FRIEDRICH KELLER, OF MILWAUKEE, WISCONSIN.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 314,683, dated March 31, 1885.

Application filed May 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH KELLER, of Milwaukee, in the county of Milwaukee, and in the 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 relates to improvements in windows, and will be fully described hereinafter.

In the drawings, Figure 1 is a vertical cross-section of my improved window, showing the double sash in position. Fig. 2 shows an elevation of the window-sash fitted with my new holder. Fig. 3 is an end view of part of said sash. Fig. 4 is a like view of the opposite side of the same, showing the friction-block; and Fig. 5 is a horizontal cross-section through the upper part of Fig. 1.

The object of my invention is to construct window-casings so as to adapt them to receive double window-sashes without changing the form of the ordinary sliding sash.

A A indicate the casing. B, the inner upper sash of the double window, is the ordinary lower sash of a single window, and has simply been raised to the top opposite the ordinary upper sash, B'. Under the central bar, *b*, of this latter is fastened the strip *b'*, the under side face of which is given the same incline downward and outward as is given to the upper face of the sill E, and the outer edge of this strip projects slightly beyond the outer face of the sash to which it is attached, and slopes from its lower face upward and inward to form a water-drip at *b''*. The chief object of this strip, however, is to cover the joint between the upper inner sash, B, and the lower inner sash, B'. The outer lower sash, B², has its upper edge beveled to correspond with the inclined lower face of the strip *b'*, and its lower edge is also beveled to fit the inclined face of the sill E. The lower half of the parting-strip *b*³ is cut as shown at *b⁴*, and sufficient play is given to the upper end of the lower part of said strip to allow of its being readily slipped out of place when the outer lower sash, B², is set in place, which is done from the inside. To provide for the passage of the sashes, either

one of the parting-strips *b*³ is bodily removed, as well as the screen-stop *b*⁶. As this arrangement of the sashes to form a double window renders them immovable during the time they are used as such, I have shown in the upper part of my window-casing an opening, C, across which are fastened slats *c c' c''* to form a ventilator, back of which I have shown a register, C'; but I lay no claim to the specific construction of the ventilator in this application, as the same forms the subject-matter of a separate application filed January 16, 1885, Serial No. 153,074.

Between the parting-strip *b*³ and the screen-stop *b*⁶ is set the screen-frame D, which is guided therein opposite the upper or lower sash, and which supports the screen D² in lieu of blinds. The sliding edge of this screen-frame, as well as the similar part of the window-sashes, is fitted with a suitable spring-plate, D', one end of which is fastened to said edge by means of the screws *d d*, while the opposite end of said plate, which is bent out, carries on its outer face a wooden block, *d'*, which bears hard against the casing. A notch, *d''*, cut into the edge of the sash or screen-frame opposite the spring end of the plate D', allows room for the play required by the spring. On the opposite edge of the sash or screen-frame a wooden block, *d²*, is fastened, projecting slightly outward, which serves as a friction-block, and as the sash is held at two points—the upper left-hand portion by the block *d'* on the spring-plate D' and the lower right-hand portion by this friction-block *d²*—it follows that when the sash is pulled down the block *d²* will receive the frictional contact on the right-hand side, and aid in preventing the undue friction on the upper right-hand portion of the sash, which would otherwise result from the action of the spring D', and thereby will serve to prevent the "sticking" of the sash at that point.

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

1. A double window formed by raising the lower sash of an ordinary single window opposite the upper sash and inserting a new sash under each, substantially as set forth.

2. In a double window, in combination with

single window-sashes, the lower one of which is raised opposite the upper one, a strip or bar fastened on the lower edge of the latter and projecting slightly outward from it, and adapted to cover the joint formed between the raised sash and the sash inserted in its place, and to form a water-drip for the outer lower sash, substantially as set forth.

3. In combination with the window-sash, notched on one edge, as at d^2 , plate D', with block d' , and the friction-block d^3 , secured within the

opposite edge, substantially as shown and described, and for the purpose set forth.

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.

FRIEDRICH KELLER.

Witnesses:

H. G. UNDERWOOD,
E. G. ASMUS.