(No Model.) 2 Sheets—Sheet 1.

E. T. EARLY.

WINDOW SASH STOP.

No. 440,947. Patented Nov. 18, 1890.

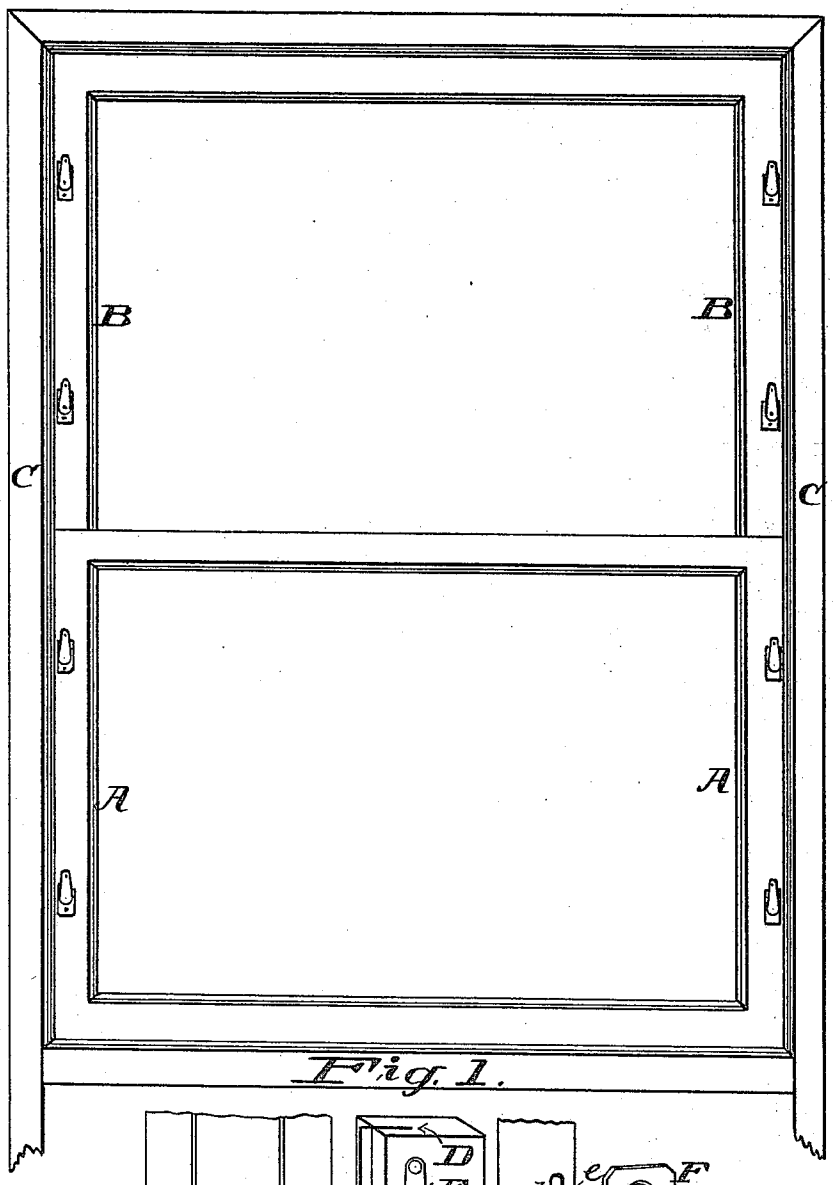


Fig. 1.

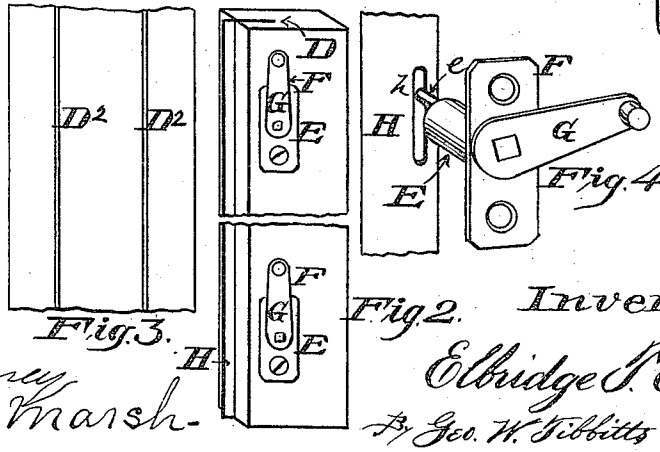


Fig. 3. Fig. 2. Fig. 4.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 5.

Fig. 6.

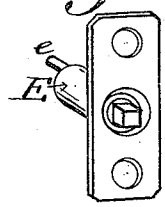




Fig. 7.

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UNITED STATES PATENT OFFICE.

ELBRIDGE T. EARLY, OF GENEVA, OHIO.

WINDOW-SASH STOP.

SPECIFICATION forming part of Letters Patent No. 440,947, dated November 18, 1890.

Application filed June 12, 1890. Serial No. 355,262. (No model.)

To all whom it may concern:

Be it known that I, ELBRIDGE T. EARLY, a citizen of the United States, and residing at Geneva, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Sash-Stops, of which the following is a specification.

This invention relates to window-sash stops, and has for its objects to enable the sash to be easily and readily removed and replaced for cleaning, repairs, or other purposes; and the invention consists in dispensing with the first and second stops now commonly used in window-frames, and substituting therefor adjustable stops set in grooves in the two sides of each sash and sliding in grooves in the window frame or jambs, said stops being adjusted by means of suitable eccentrics or cams fixed in the side sash-bars and turned by levers, buttons, or with a screw-driver for moving the stops when desired for taking the sash out from the frames.

The invention consists in the peculiar constructions and combinations of parts, substantially as hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a front elevation of a window having my improved adjustable stops attached. Figs. 2, 3, and 4 are respectively detail views of the parts comprising my invention. Fig. 5 is a cross-sectional view through both sash, showing the strips and strip-operating devices. Fig. 6 is a detached view of escutcheon and pin as having a square stud for applying a key for turning same. Fig. 7 represents the key.

In Fig. 1, A represents the lower, and B the upper, sash of a window, and C C the side frame or jamb.

The custom has been to provide a narrow wooden stop in a window-frame between the two sash, set in a groove in the frame, and a wooden stop on the inside of the frame. In order to remove the sash from the frame it is necessary to remove these stops, which invariably injures them. Instead of these stops, which I entirely dispense with, I cut a narrow groove D, Fig. 2, in the two side edges of the sash, and corresponding grooves D^2, Fig. 3, in the two jambs of the frame.

E is a thick short round pin fixed to turn in a plate or escutcheon F, by means of a lever or crank G, and having on the inner end a pin *e*, on one side of its axial center, which when said pin E is placed in the sash enters a slot *h* in the strip H, as seen in Fig. 4. The strips H, which are preferably made of metal, are the same length as the sash, and are fitted to be held in the grooves in the sash and carried up and down with it when the sash are moved, and also to slide in the corresponding grooves in the jambs of the frame. Two of the pins E are placed in each side of the sash, at equal distances apart and about one-fourth the length of the sash from its corners, as shown in Fig. 1, in holes connecting with the grooves in the sash, the small pin *e* entering the slots in the strip H. Now when it is desired to remove the sash for any purpose the pins E may be turned half-way round by the levers G, the small pins *e* playing in the slots *h*, and, acting as cams or eccentrics, carry the strips H inward with their outer edges flush with the edges of the sash. Then the sash are free to be taken out.

Instead of the levers G, the heads of the pins E may be set in countersinks in the escutcheons F, and have a groove by which they may be turned with a screw-driver or wrench, as seen at the stars, (* *,) Fig. 5. This would leave no projection to interfere with sliding the upper sash, or a stud and key may be employed, as represented by Figs. 6 and 7.

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

In combination with a window sash and frame, each provided with grooves D D^2, the strips H H, fitted in the grooves in the sash, and provided with slots *h h*, and the pins E E, fitted to turn in the sash, and having pins *e e* playing in the slots *h h*, and suitable means for turning said pins E E, substantially as described, and for the purpose set forth.

ELBRIDGE T. EARLY.

Witnesses:
GEO. W. TIBBITTS,
M. G. NORTON.