

F. M. DAVIS.
Sash-Holders.

No. 142,994.

Patented September 23, 1873.

FIG. 1.

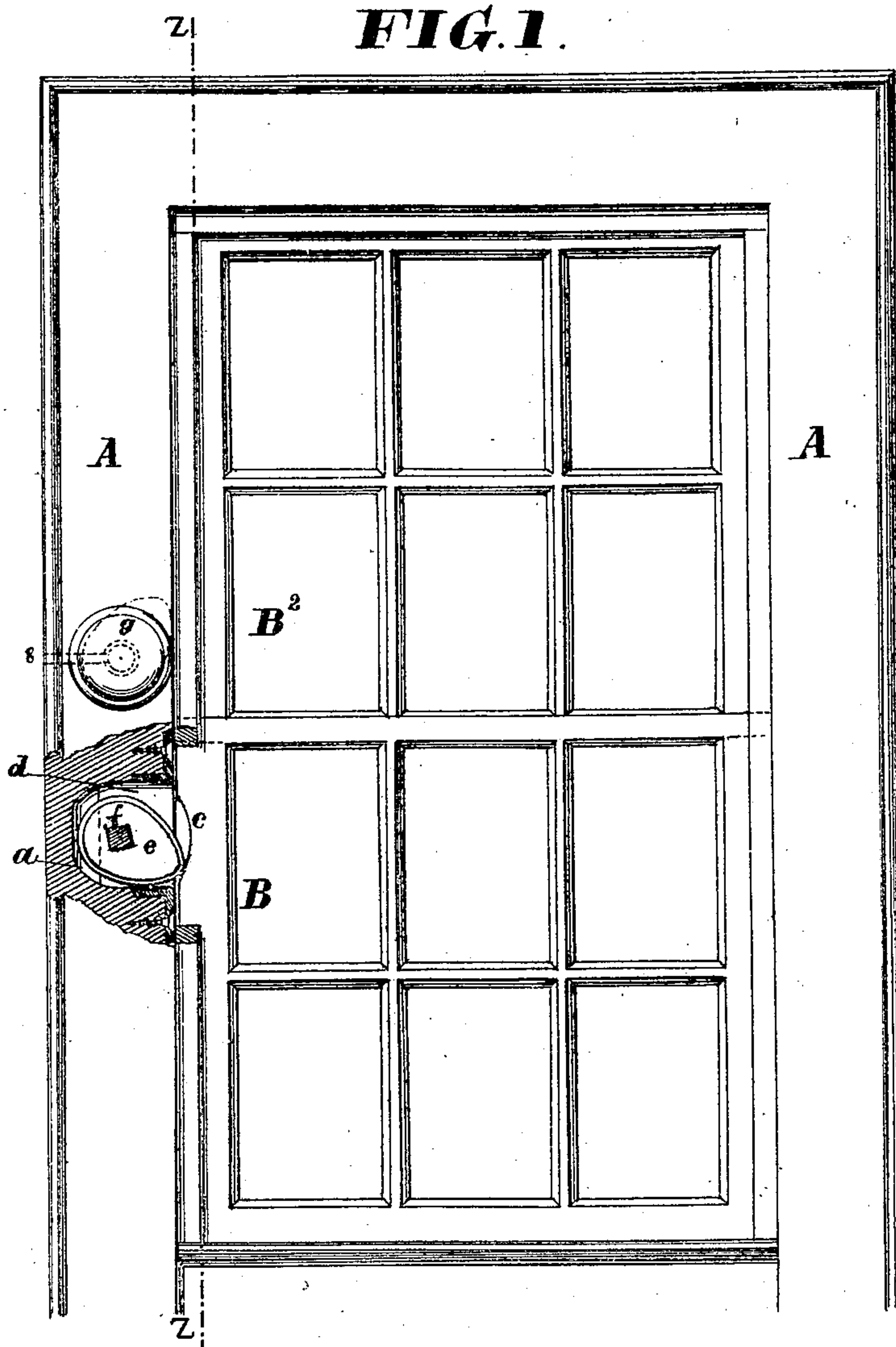


FIG. 2.

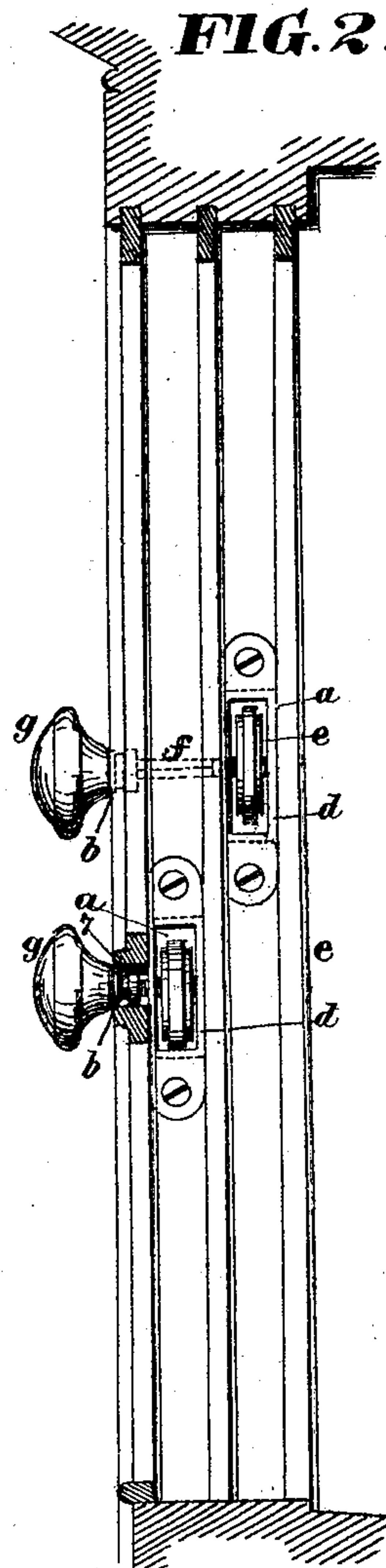


FIG. 4.

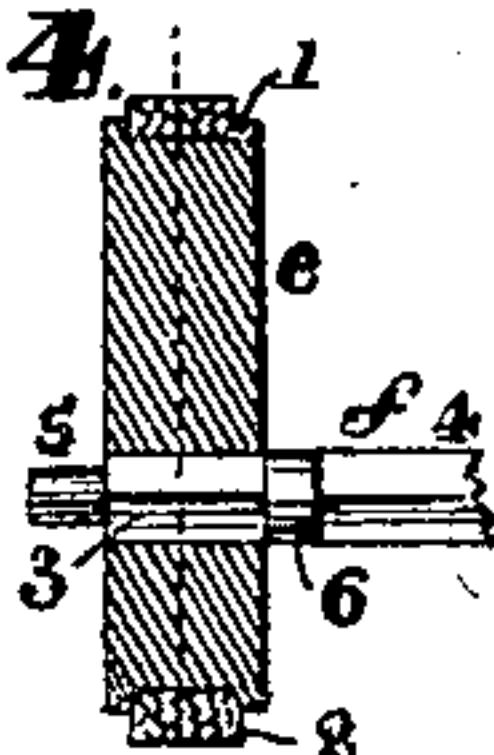


FIG. 3.

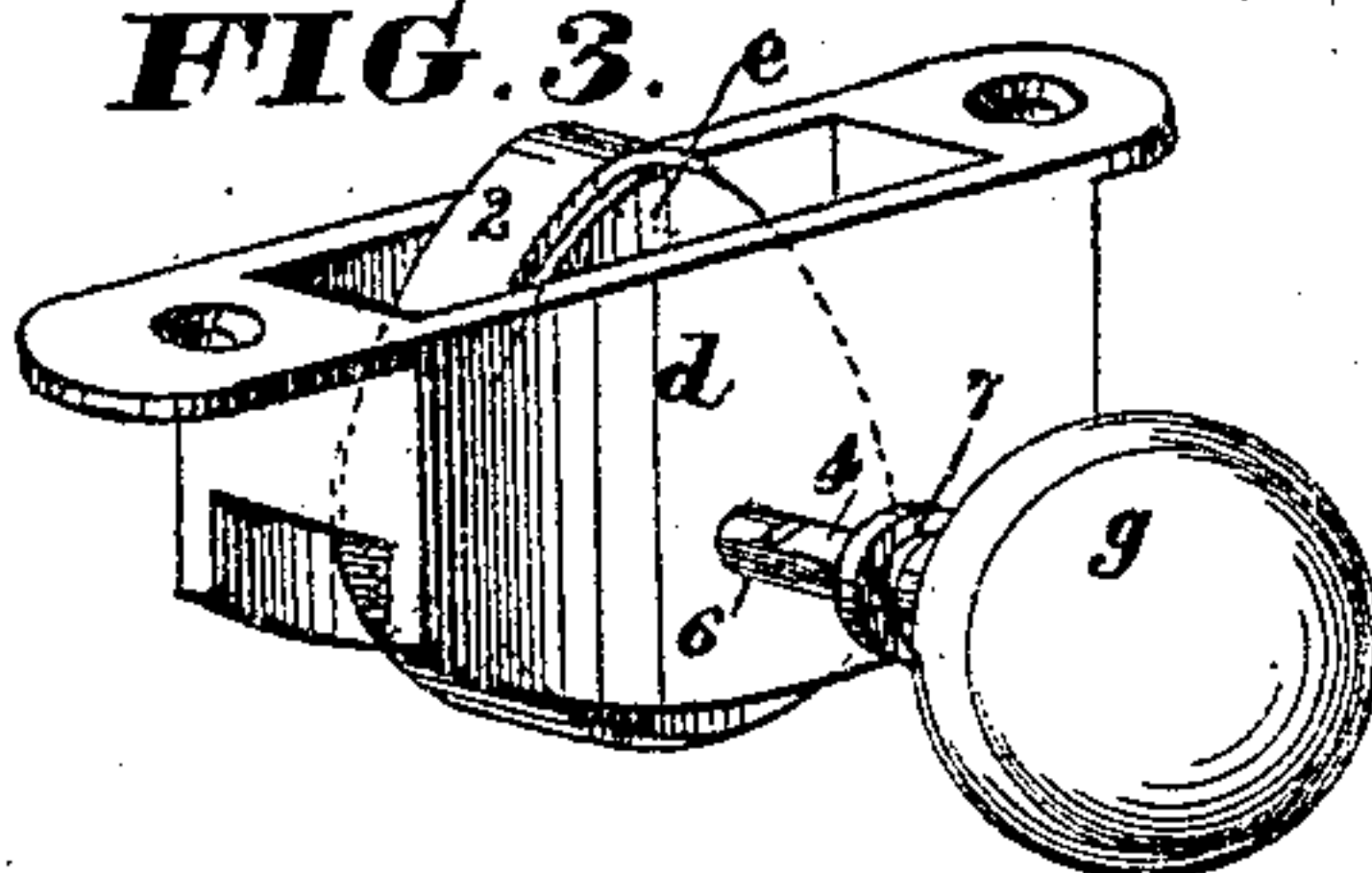
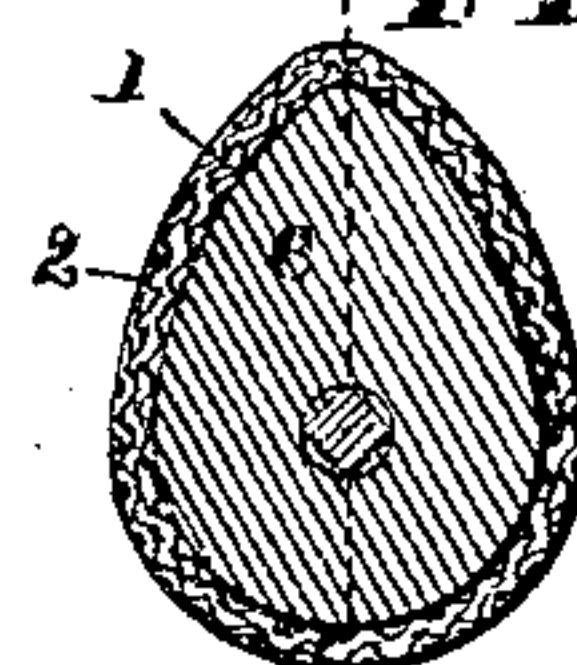


FIG. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANCIS MARION DAVIS, OF LA CYGNE, KANSAS.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. **142,994**, dated September 23, 1873; application filed February 25, 1873.

To all whom it may concern:

Be it known that I, FRANCIS MARION DAVIS, of La Cygne, in the county of Linn and State of Kansas, have invented a certain Sash-Holder, of which the following is a specification:

This invention relates to a simple form of automatic sash-holder, applied within the window-jamb, and reversible to lock the lower sash closed. The invention consists in a friction-cam journaled in a mortise-frame by means of an angular shaft, which is furnished with a knob having a grooved neck to receive a retaining-pin, the same operating as hereinafter set forth.

Figure 1 is a face view, partly in section, of a window with sash-holder applied, illustrating this invention. Fig. 2 represents a vertical section on the line $z z$, Fig. 1. Fig. 3 is a perspective view of a holder detached. Fig. 4 and Fig. 5 are sectional detail views of a holding-cam.

The drawing is not made to a scale.

To carry out this invention mortises a are formed in either jamb of a window-frame, A , on each side of the parting-rail. Intersecting holes b are bored through from the face of the frame, and a segmental recess, c , concentric with the lower of these holes, is cut in the edge of the lower sash B . The upper sash B^2 requires no special conformation.

The remaining parts of the device, or the holders proper, are designed to be cheaply manufactured in quantity for supply to builders and dealers; and are adapted for application to either side of the frame. One part, metallic frames d , are applied in the mortises a so as to be flush, and are secured by countersunk screws. Cams e are placed within the cavities of these frames, and secured and journaled by means of shafts f introduced through the holes b ; and to these shafts knobs g are applied to constitute the means, primarily, for operating the cams through the shafts, and, in a subordinate capacity, to secure the cams and shafts in position. These cams e are each cast with a circumferential groove, 1, and in

this a rubber band, 2, is applied to form a sensitive frictional bearing-surface. The shafts f are constructed with squares 3 4 to engage with corresponding sockets in the cams e and knobs g , and with cylindrical journals 5 6, the outer larger than the squares, which may be of equal size; and the inner smaller, to admit of the application of the shafts in the manner stated. The knobs g have each a circumferentially-grooved neck, 7, occupying the outer end of one of the holes b , and engaged by a retaining-pin, 8, introduced from the edge of the frame.

The knobs may be of ornamental material or configuration.

The shafts differ in length. The other parts may be of uniform size for the different sashes.

The operation of the improved holder is as follows: In normal condition the cams e rest against the edges of the sashes, and engage therewith by friction. The weight of the sashes thus tends to rotate the cams, which is prevented by the position of the shafts. The sashes are, consequently, supported until released by turning back the cams by means of the knobs g . When a sash is lifted the cams slip, and hold again automatically when the motion of the sash is reversed. When the lower sash is down the recess c in the edge thereof is brought opposite the lower cam e , which then drops, or may be turned to the position represented in Fig. 1, so as to lock the window closed by a reversal of the described action. The sash is released by turning the cam back as for lowering the same.

The following is claimed as new, namely:

A sash-holder, composed of a mortise-frame, d , a cam, e , with circumferential groove 1 and rubber band 2, a shaft, f , with squares 3 4 and journals 5 6, and a knob, g , with grooved neck 7, fitted to receive a retaining-pin, as herein shown and described.

FRANCIS MARION DAVIS.

Witnesses:

S. D. CADY,
H. S. CADY.