G. W. CLARK.

SASH-HOLDER.

No. 192,231. Patented June 19, 1877.

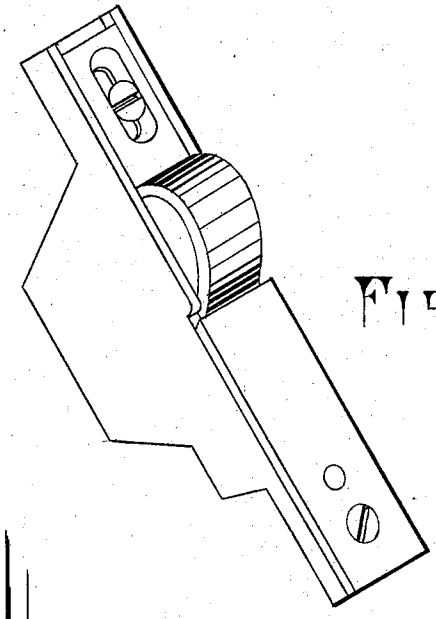


FIG. 1.

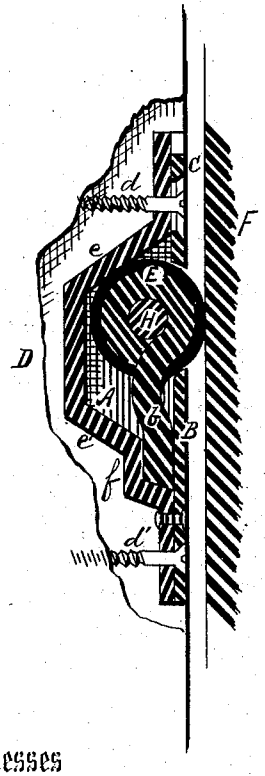


FIG. 2.

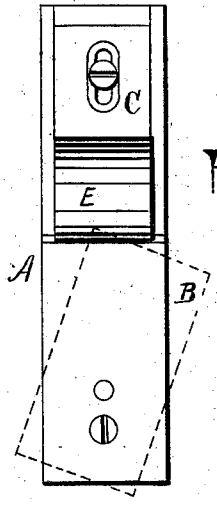


FIG. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE W. CLARK, OF WHEELING, WEST VIRGINIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN FLADING, OF SAME PLACE.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. **192,231**, dated June 19, 1877; application filed May 16, 1877.

To all whom it may concern:

Be it known that I, GEORGE W. CLARK, of the city of Wheeling, county of Ohio, State of West Virginia, have invented certain new and useful Improvements in Sash-Holders; and I hereby declare the following to be a full, clear, and explicit description of the same, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to sustain or hold window-sash in any vertical position in the frame it may be desired; and to this end my invention consists of a leather-faced rubber cam of peculiar shape, which is inclosed in a metallic case or pocket having inclined ends and adjustable face-plates, the case mortised in the edge of the sash-stile, with the face-plates flush with the outside edge of the sash.

In its operation the leather-faced cam holds the sash in position by frictional contact with the side of the window-frame, the degree of contact being regulated by an adjustable slide-piece in the face of the case, by means of which the cam is advanced or set back, as required, all as hereinafter more fully described and claimed.

In order that those who are versed in the art to which my invention appertains may make and use the same, I will now proceed to more fully explain its construction and mode of operation, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the device detached from the sash. Fig. 2 is a vertical central section; Fig. 3, a front view.

In the drawings, the letter A designates the metallic case, constructed with parallel sides and inclined ends *c c'*, the lower end having an offset or recess, *f*, for the receival of the end of a spring-piece forming part of the leather-faced rubber cam. B is a movable face-plate, pivoted to an end projection of the case A, made removable for the purpose of admitting the cam in its position in the case. C is an adjustable face-plate to regulate the frictional contact of the cam. *d d'* are wood-screws to secure the case in frame of sash, the screw *d* serving as a set-screw to regulate the slide-plate C. The letter E represents a leather-faced roller or cam, having a flat rectangular spring-piece, *b*, of suitable length, extending from the side of the cam, of which it forms an integral part. This spring-piece *b* fits in the recess *f* in the end of the case A, and is held in position by the plate B. The cam E is constructed with a wooden or metal core, H, to strengthen the cam and prevent it flattening when in operation. D is a portion of a sash; F, the window-frame.

By means of the elastic spring-piece *b* the cam E is made self-adjustable to the space between the sash and frame, and the binding power of the cam is regulated by means of the slide-piece C, which prevents the cam from rolling farther up the inclined end *e*, and holds it firmly in position when the weight of the sash is on the cam. The binding power can be so accurately adjusted by means of this slide-piece that the sash will be held stationary in any position it may be desired, and only require a slight pressure of the hand to lower the same.

The cam can be made entirely of india-rubber; but the binding-surface, when made of this material, becomes rough by the friction, and causes a jerking motion when moving the sash, and therefore I deem it best to face the india-rubber cam with leather, secured to the same with glue, or by sewing or riveting in a durable manner, the advantage of the leather being that it does not wear rough on the binding-surface like rubber, and will permit the sash to slide smoothly without jerking when force is applied to operate the same. The cam may also be made of rubber, in one piece, with a hard or solid center and soft periphery; and it may be that rubber can be so formed or hardened that it resembles leather, and will last or wear equally as well as leather. I, therefore, do not wish to be understood as confining myself strictly to leather-faced cams, although I prefer these to all others that I have used.

In applying my sash-holder to windows, I mortise one in the sash-stile near the meeting-rail, and one near the bottom rail, both on one side of the sash, the object of so placing them being to keep the sash frame always parallel with the jamb of the window-frame, whereby

more satisfactory results are obtained than where the sash binds on one corner, as is invariably the case where only one holding device is used. The case is secured to the sash with ordinary wood-screws in each end of the face-plate, the top screw serving in place of a set-screw to hold the adjustable slide-piece.

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

1. In a sash-holder, the leather-faced rubber cam E, having an elongation or spring-piece, *b*, and either with or without a metal or wooden core, H, substantially as herein shown, and for the purpose set forth.

2. In a sash-holder, the leather-faced india-rubber cam E, metallic case A, adjustable slide-plate C, and pivoted face-plate B, substantially as herein shown, and for the purpose set forth.

3. The combination, in a sash-holder, of case A *e*, cam E, spring-piece *b*, adjustable plate C, pivoted plate B, and set-screw *d*, all constructed and arranged substantially as described, for the purpose set forth and shown.

GEORGE W. CLARK.

Witnesses:
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