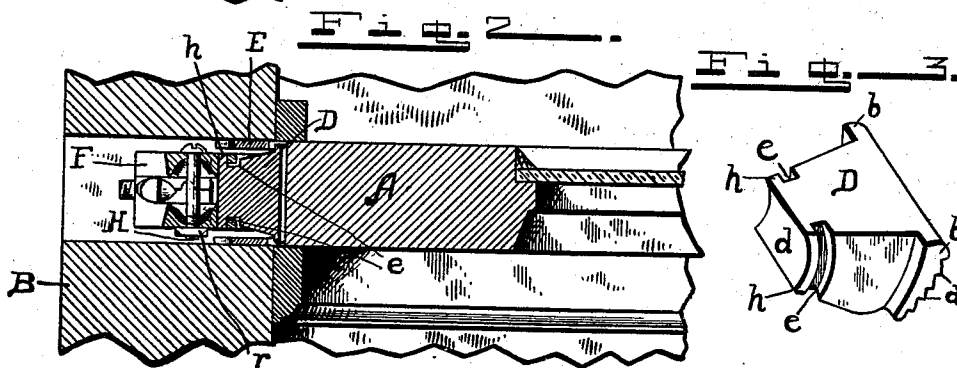
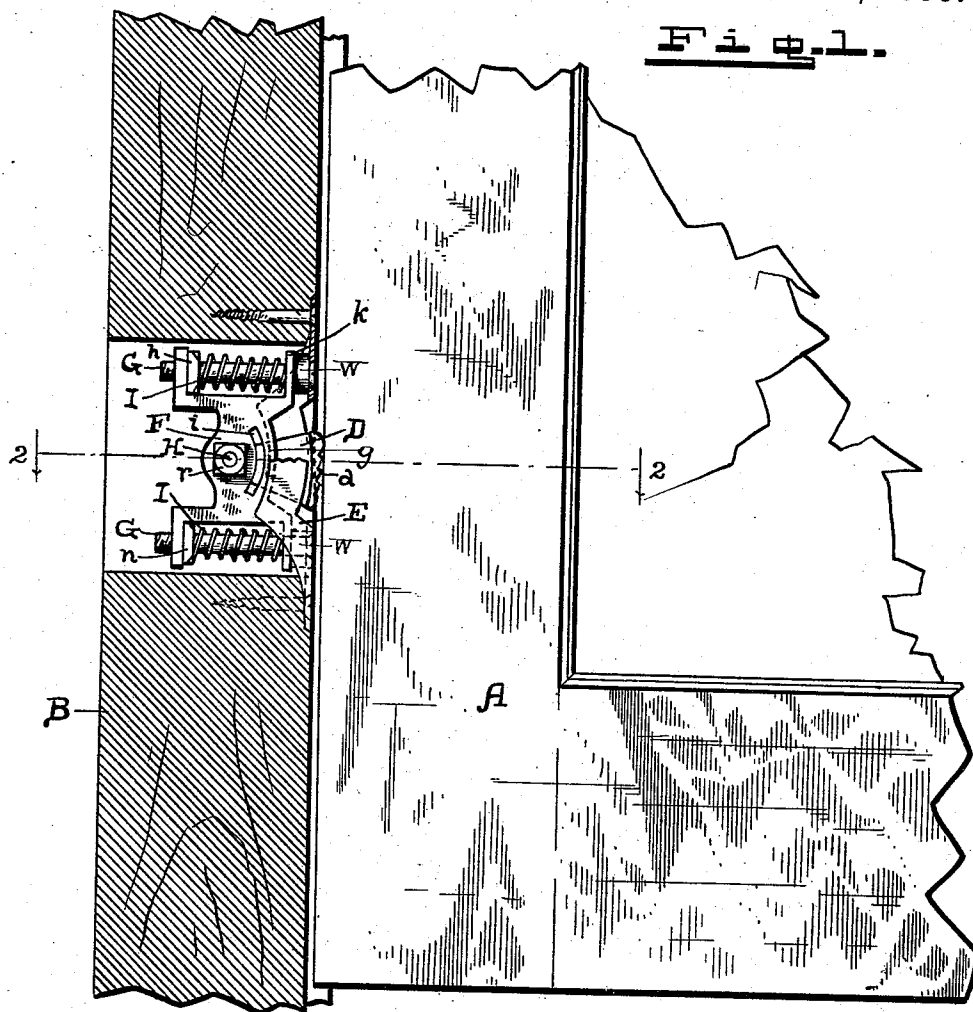


(No Model.)

W. H. DALBEY.
SASH HOLDER.

No. 552,045.

Patented Dec. 24, 1895.



Witnesses:

F. N. Hoerner.
Richard P. Bradley.

Inventor.

William H. Dalbey,
by Heber S. Paramount,

ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM H. DALBEY, OF INDIANAPOLIS, INDIANA.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 552,045, dated December 24, 1895.

Application filed August 1, 1895. Serial No. 557,912. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DALBEY, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Sash-Holders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to sash-holders of the class that are adapted to be attached to a window-frame, and having a friction-cam to engage the window-sash and a means whereby the pressure of said cam against the sash may be regulated.

The objects of my present invention are to effect certain improvements in a sash-holder for which Letters Patent of the United States were issued to me September 13, 1892, the same being numbered 482,710, which are set forth in the following specification.

Figure 1 is a view of the sash-holder, showing the manner of applying it and having a part of the supporting-plate broken away. Fig. 2 is a horizontal sectional view taken on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of the friction-cam.

A indicates the sash; B, the window-frame; D, the friction-cam; E, the supporting-frame; F, the adjustable frame; G, the adjusting-bolts; H, the bolt securing the two sections of the adjustable frame together, and I the springs surrounding the bolts G.

The face of the friction-cam D has a series of notches *a* extending horizontally across it, for the purpose of more surely holding the sash, and has projecting ends *b*, which extend over the sides of the supporting-frame E, for the purpose of giving a wider bearing-surface against the sash A. The inner end *d* of the cam is in the form of a segment and bears against the boxing surrounding the bolt H and is slightly rotatable thereon. Segmental grooves *e* are formed in the sides of the cam near its inner end *d*. In the sides of the adjustable frame F are segmental slots *i*, leaving a narrow segmental strip *g*, which fits into the grooves *e* of the cam D, and the edges *h*,

between the groove *e* and the end *d*, are adapted to fit in the slots *i* of the frame F. The slots *i* in the frame F, being of greater length than the edges *h* of the cam, allow the cam to be raised and lowered; but the movement both up and down is positively limited to the ends of the slot *i*. The heads of the bolts G engage the face of the supporting-frame E and pass through said face. A yielding washer *w* is placed on the bolt so that it will be between the supporting-frame E and the projection *k* of the adjustable frame F. The springs I are then placed on the bolts, and the nut *n* to secure them. The smaller end of the friction-cam is then inserted in the central opening in the supporting-frame E, and the two sides of the adjustable frame F are brought together, so as to embrace the bolts G, and to allow the ends *h* of the cam D to fall within the slot *i* in the sides of the frame F. The bolt H then secures said sides together and prevents any part from becoming detached until the nut *r* is removed from the bolt H.

In operation the cam D is raised with the sash; but when the sash begins to descend the notches *a* engage with the sash, and the shape of said cam causes it to hold the sash. The springs I on the bolts G are tightened or loosened by means of the nut *n*. This is effected by turning the head of the bolt from the face of the supporting-frame, as the nut *n* is secured against turning by having one edge resting against the adjustable frame F. By this means the tension of the springs may be regulated without removal from the window-frame.

It is obvious that the pressure of the cam D against the sash can be so regulated that it will support the weight of the sash, but will yield when an additional weight is placed upon the sash, such as a downward pull. In lieu of the springs I, surrounding the adjusting-bolts G, any suitable material having sufficient elasticity may be used. In my former patent I used a friction-roll which was supported by lugs, there being nothing to prevent the roll from falling out of the frame, which was a serious disadvantage, as the rolls were likely to be dislodged and lost when the sash was not in contact with them. The rolls, being smooth, did not sufficiently grip the sash to render it

at all times certain, and from its construction and manner of attaching to the supporting-frame the roll had to be narrower than the edge of the sash, which had a tendency to wear a groove in the sash. All these disadvantages are overcome by my present invention.

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

In a sash holder, the frame F, made in two parts and provided with the segmental slots *i*, and the narrow segmental strips *g*, combined

with the friction cam D, provided with the segmental grooves in its ends, and the bolt *r* for closing the two parts of the frame upon the cam and forcing the strips into the grooves, whereby the cam is loosely locked to the frame, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. DALBEY.

Witnesses:

RICHARD P. BRADLEY;

LULU M. KUTSCH.