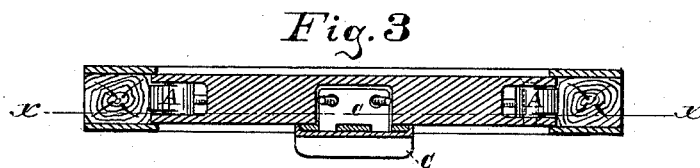
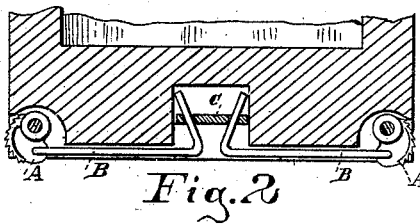
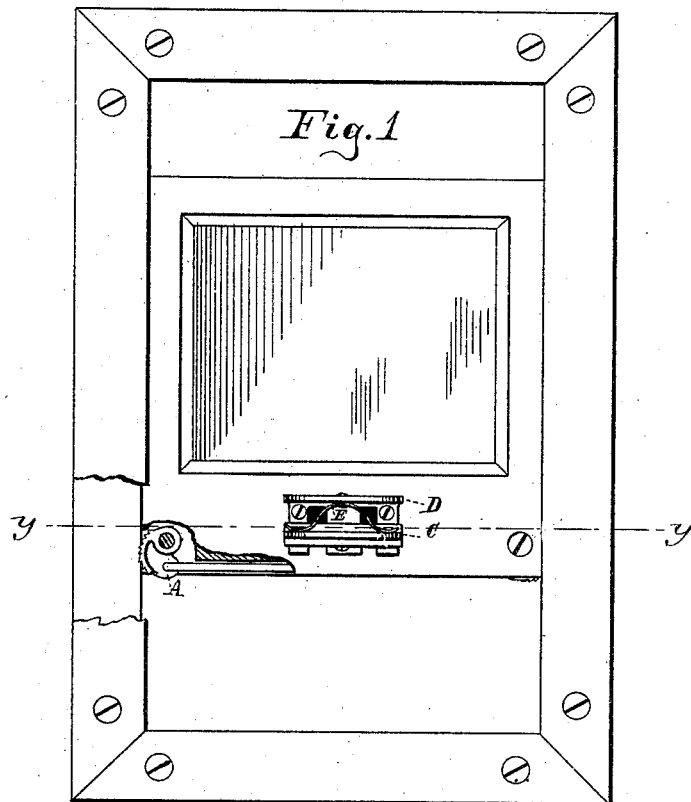


E. BERNHARDT
Sash-Holder.

No. 217,056.

Patented July 1, 1879.



Attest
Chas. F. Bessert
No. 100.

Inventor
Ernst Bernhardt
By Geo. Murray
Atty

UNITED STATES PATENT OFFICE.

ERNST BERNHARDT, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF HIS
RIGHT TO MAX CERF, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. **217,056**, dated July 1, 1879; application filed
March 21, 1879.

To all whom it may concern:

Be it known that I, ERNST BERNHARDT, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Window-Sash Locks, of which the following is a specification.

This invention is an improved means of locking a window-sash in any desired position. It is especially intended for railroad-car windows.

It consists of the combination of a pivoted cam, a connecting-rod attached with one end to the cam, and a perforated slide, which acts on the other and oblique end of the connecting-rod. These parts are preferably used in duplicate, so that the sash may be locked on both sides.

In the accompanying drawings, in which identical parts are indicated by the same letters in the different figures, Figure 1 is a front elevation of a window frame and sash fitted with my improvements. A portion of the frame and sash is broken away to expose the eccentric and connecting rod. Fig. 2 is a vertical section taken in line *x x*, Fig. 3; and Fig. 3 is a sectional plan taken in the plane of line *y y*, Fig. 1.

Referring to the parts, A A are cams or eccentrics, journaled upon pins in the vertical rails of the sash, and B B are the actuating or connecting rods. These are bent at a right angle at their outer ends to enter holes in the cams A A. The inner ends of these rods are bent upward at acute angles, and pass through holes in the sliding piece C.

D is an angle-piece, which is secured upon the lower rail of the sash. The plate by which it is attached to the sash-rail is slotted to form a guide for the slide-piece C, the inwardly-projecting plate of this piece being perforated to receive the central piece between the slots, and its edges bearing against the outer pieces of plate D, together with flanges on piece C, which turn down over the outer edges of the plate D, and serve to guide the piece C and permit it to slide freely.

E is a spring, secured to the under side of the thumb-piece, formed by the angle of piece D. It bears upon the top of piece C, and by pressing it down separates the oblique ends of the wire rods B B, and forces the edges of the locking-cams A against the window-frames, thus locking the sash firmly in any position.

To operate my device to change the sash from one position to another, the pieces C and D are taken between the first finger and thumb and pressed together. This, by drawing up the piece C, will draw the inner oblique ends of rods B together and release the pressure of the cams A from the frame, when the sash is, by means of the pieces C and D, moved to the desired position. As soon as these pieces are released the spring E will press down piece C, separate the ends of rods B B, and lock the sash by forcing the cams against the frame.

Should it be desirable to lock the sash in the lower position, so that it cannot be opened from the outside, this can be accomplished by notching the window-frame to receive the cams A when the sash is down.

I have shown the edges of the cams A roughened or notched. This will serve every purpose when hard wood is used in the frame; but when soft wood is used a correspondingly roughened or notched plate may be secured on the edge of the frame, to engage teeth in the cam, or a rubber-edged cam substituted for the one shown.

I claim—

The combination, substantially as specified, of the pivoted cam, the connecting-rod having an oblique end, the spring, and the perforated slide acting on the oblique end of the connecting-rod.

ERNST BERNHARDT.

Witnesses:

MAX CERF,
GEO. J. MURRAY.