

(No Model.)

F. BURMEISTER.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 520,754.

Patented May 29, 1894.

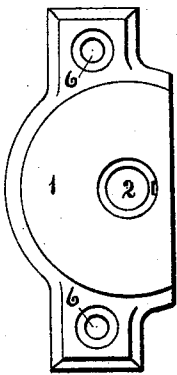


FIG. 1.

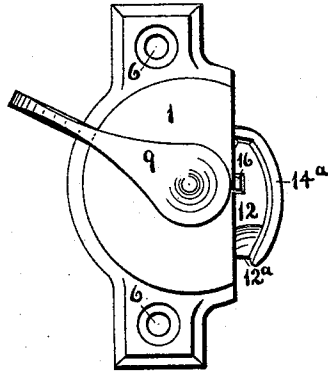


FIG. 2.

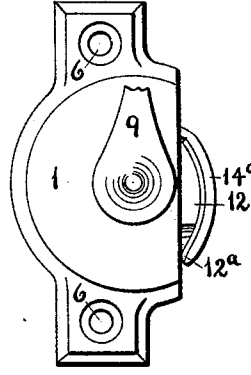


FIG. 3.

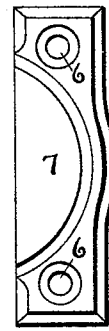


FIG. 4.

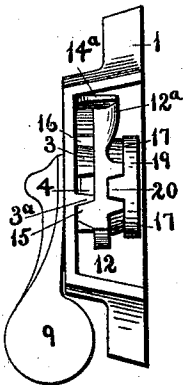


FIG. 5.

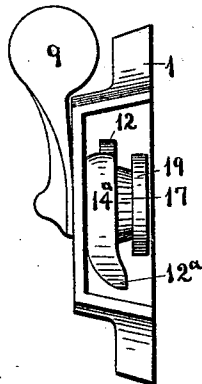


FIG. 6.

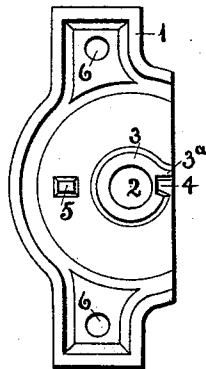


FIG. 7-

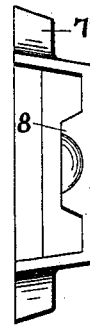


FIG. 8.

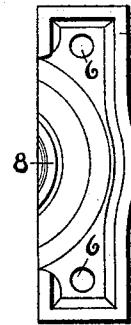


FIG. 9.

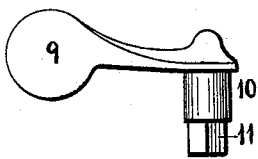


FIG. 10.

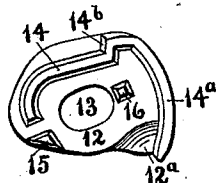


FIG. 11.

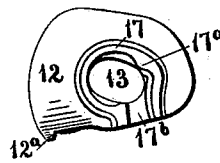


FIG. 12.

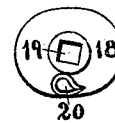


FIG.13.



FIG 14.

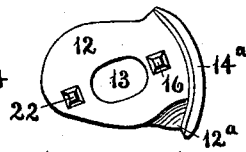


FIG. 15.

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# UNITED STATES PATENT OFFICE.

FREDERICK BURMEISTER, OF CLEVELAND, OHIO, ASSIGNOR TO THE KEAN & DOTY MANUFACTURING COMPANY, OF SAME PLACE.

## FASTENER FOR THE MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 520,754, dated May 29, 1894.

Application filed October 31, 1893. Serial No. 489,635. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK BURMEISTER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Fasteners for Meeting-Rails of Sashes, of which the following is a full, clear, and exact description.

My invention consists of two cases, one for each the upper and lower window sashes, a lever-arm provided with a round post and square pin which extend into the lower sash case to receive a cam of peculiar construction and a locking-piece, said upper sash case having a lip adapted to be engaged by said cam.

The object of my improvement is to provide a cheap and durable lock for window sashes, by means of which said sashes are drawn together, when separated or sprung apart, and securely held in place so that they cannot be raised or lowered.

My device not only fastens the windows, but is itself locked in such a manner as to prevent a person on the outside from releasing the same with a thin steel instrument introduced between the meeting-rails of the sashes.

That my invention may be seen and fully understood by others, reference will be had to the following specification and annexed drawings forming a part thereof, in which—

Figure 1 is a top view of the lower sash case; Figs. 2 and 3, top views of said case, the lever-arm and the cam, the two latter being shown in different positions; Fig. 4, a top view of the upper sash case; Figs. 5 and 6, side views of the lower sash case and its several parts in different positions; Fig. 7, a bottom view of the lower sash case; Fig. 8, a side view of the upper sash case; Fig. 9, a bottom view of said upper sash case; Fig. 10, a side view of the lever-arm; Figs. 11 and 12, top and bottom views respectively of the cam; Fig. 13, a top view of the locking-piece; Fig. 14, a modification of the lower sash case shown in Fig. 7, and Fig. 15, a modification of the upper side of the cam shown in Fig. 11.

Similar numerals of reference designate like parts in the drawings and specification.

The lower sash case 1 has the opening 2

therein and the bottom of said opening is surrounded by the flange 3 provided with the nose 3<sup>a</sup> and the notch 4. Back of the flange 3, on the bottom of the case 1, is the lug 5 and in each end of said case is the hole 6 through which to pass the screws that attach the case to the meeting-rail of the lower window sash. The case 7 is provided with the screw-holes 6, in the ends, for attaching said case to the meeting-rail of the upper window sash and has the depending, integral lip 8. Said lip 8 is in the form of an arc of a circle. The lever-arm 9 has the round post 10, at one end, standing at right-angles to said arm and terminating in the square pin 11. The post 10, of the arm 9, is of the same diameter as the opening 2, in the case 1, and is inserted therein, while said arm may be freely rotated upon the upper surface of said case.

The cam 12 is of essentially the form shown in Figs. 2, 3, 5, 6, 11 and 12 and is provided with the elliptical opening 13 sufficiently large to receive the post 10 and allow said cam to play around said post. The front portion 12<sup>a</sup>, of the cam 12, is deflected downward to more readily allow of engagement with the lip 8, of the case 7. On the upper surface of the cam 12 are the flange 14 and the lugs 15 and 16. The peripheral part 14<sup>a</sup>, of the flange 14, is in the form of an arc of a circle having the same radius as the lip 8, of the case 7, and the shoulder 14<sup>b</sup> is formed by an offset in said flange. On the under side of the cam 12 is the flange 17 provided with the internal shoulder 17<sup>a</sup> and leaving the space 17<sup>b</sup> between the ends of said flange.

The locking-piece 18 is provided with the square opening 19 and the lug 20. The lug 20 is on the top of the piece 18 while the bottom of said piece is flat. The opening 19 fits closely over the square pin 11, of the lever-arm 9, and said pin is "headed over" on the bottom of the piece 18 to secure the several parts of the case 1 together. The cam 12 rests against the case flange 3, with the cam flange 14 partially encircling said case flange and the locking-piece 18 is in contact with the cam flange 17.

When the lock is open, as illustrated in Fig. 5, the flange shoulder 14<sup>b</sup>, on the cam 12,

is in contact with the case lug 5, the cam lug 15 with the outside of the nose 3<sup>a</sup> of the case flange 3, and the lug 20, on the locking-piece 18, is in the space 17<sup>b</sup>, between the ends of the cam flange 17. To close the lock, rotate the lever-arm 9, and the locking-piece 18 by means of the lug 20 causes the cam 12 to describe about the fourth part of a circle and engage its peripheral flange 14<sup>a</sup> with the lip 8, of the case 7. The cam 12 now assumes the position shown in Fig. 2. The cam lug 16 is in contact with the inside of the case flange nose 3<sup>a</sup> and prevents further revolution of the cam 12, hence by continuing to rotate the arm 9, owing to the relative positions which said cam and the piece 18 have now assumed toward each other, the lug 20 moves along the flange 17, until it strikes the shoulder 17<sup>a</sup>, and at the same time draws said cam inward, with said lug 16 in the notch 4. When the cam 12 is drawn inward the case lug 5 is received between the cam lug 15 and the end of the flange 14. The cam 12 now stands as indicated in Figs. 3 and 6 and, when engaged with the case 7, draws and holds the same against the case 1. The cam 12 can only be returned to its former position through the medium of the arm 9, since the lug 16 is lodged in the notch 4 and the lug 5 between the lug 15 and the end of the flange 14 and they can not be disengaged without removing the lug 20 from its position against the shoulder 17<sup>a</sup>.

To unlock the cases 1 and 7, revolve the lever-arm 9 in the direction opposite to that already described; thereby turning the locking-piece 18 until the lug 20 enters the space 17<sup>b</sup> and bears against the end of the flange 17, forcing the cam 12 outward until the lug 16 is free from the notch 4, the lug 15 and the end of the flange 14 from the lug 5, and then

rotating said cam back to its former position, clear of the case 7.

A modification of the case 1 and of the cam 12 is shown in Figs. 14 and 15 respectively, in which the flange 21 partially encircles the flange 3; leaving a space between for the cam lugs 16 and 22 to operate in. The flanges 3 and 21 are connected by the ridges 24 and 25, which take the place of the nose 3<sup>a</sup> and the lug 5 in Fig. 7, and the opening 21<sup>a</sup> is left for the passage of the lug 16 when the lug 22 enters the notch 4. With the exception of the peripheral flange 14<sup>a</sup>, the flange 14 is omitted from the top of the cam shown in Fig. 15. It will be readily seen that the modification is of substantially the same construction as that hereinbefore described, but somewhat stronger.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a window sash lock, the perforated case 1, the lug 5 and notched flange 3 on the under side of said case, a lever-arm having at one end a round post terminating in a square pin projected into said case, the perforated cam 12 deflected at 12<sup>a</sup>, the shouldered and peripheral flange 14 and the lugs 15 and 16 on the top, and the shouldered flange 17 having the opening 17<sup>b</sup>, on the bottom of said cam, and the perforated locking-piece 18 adapted to be secured to the pin of said post and having the lug 20 on the top of said piece, in combination with the case 7 and the depending lip 8 on said case, substantially as and for the purpose set forth.

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

FREDERICK BURMEISTER.

Witnesses:

F. A. CUTTER,  
JOHN B. LINN.