(Model.)

2 Sheets—Sheet 1.

J. C. HAUSER.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 492,799. Patented Mar. 7, 1893.

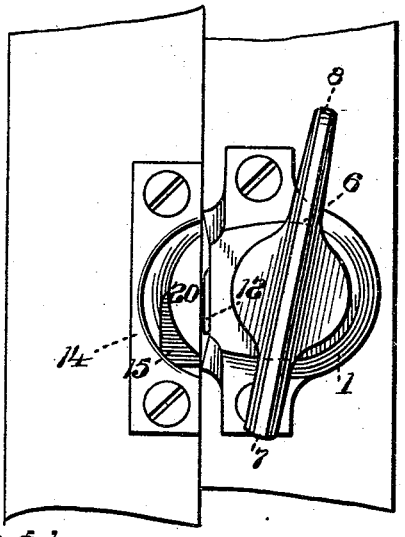


Fig. 1.

Fig. 2.

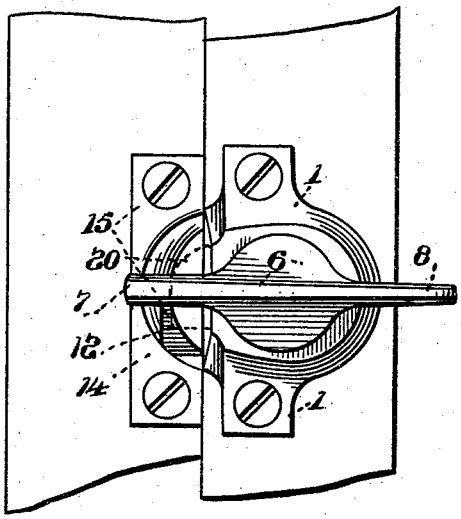


Fig. 3.

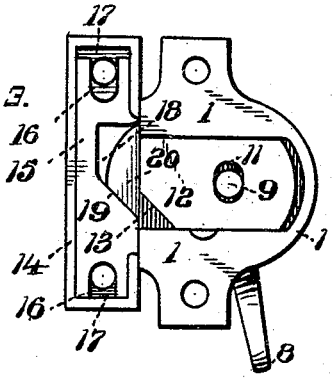


Fig. 4.

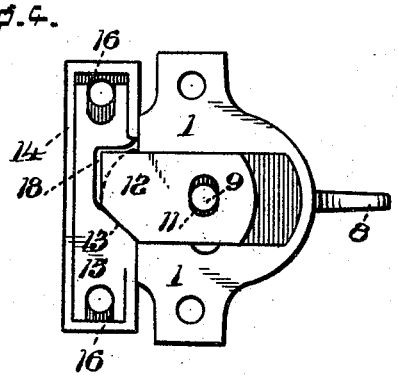


Fig. 5.

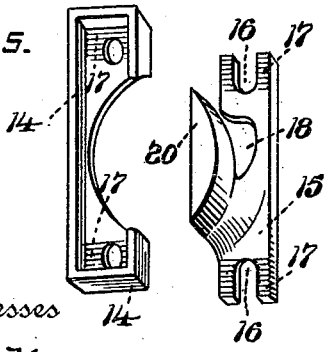
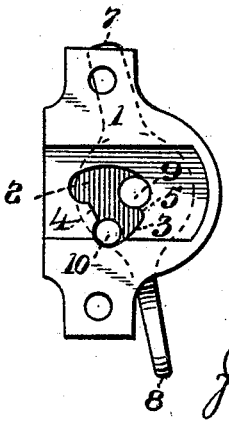


Fig. 6.



Witnesses

C. M. Newman,

A. J. Tanner.

Inventor

Joseph C. Hauser,

by D. H. Hubbard,

Attorney

(Model.)

2 Sheets—Sheet 2.

J. C. HAUSER.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 492,799. Patented Mar. 7, 1893.

Fig. 7.

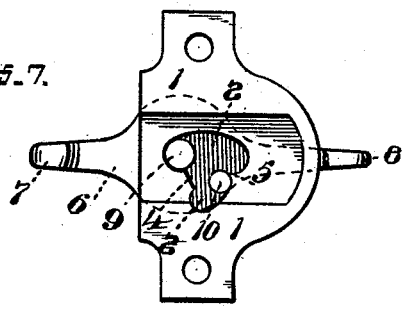


Fig. 8.

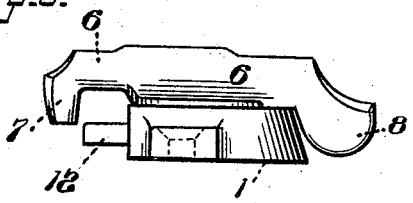


Fig. 9.

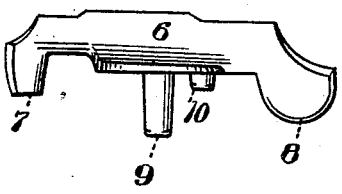
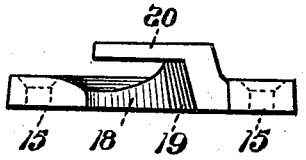


Fig. 10.



Witnesses

C. M. Neuman,

A. J. Tanner.

Inventor

Joseph C. Hauser

by D. A. Hubbard

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH C. HAUSER, OF NEW HAVEN, CONNECTICUT.

FASTENER FOR THE MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 492,799, dated March 7, 1893.

Application filed June 22, 1892. Serial No. 437,561. (Model.)

To all whom it may concern:

Be it known that I, JOSEPH C. HAUSER, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Sash-Fasteners; and I do hereby 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.

This invention relates to certain new and useful improvements in sash fasteners, and has for its object to provide a device of this description which shall be simple and cheap in construction, and which shall perform toward the window sash rails a three-fold function, namely, first, it will in common with ordinary sash fasteners prevent vertical movement of one sash relative to the other; second, it will draw the two sashes together; and third, it will move them slightly in a lateral direction and force them against the casings. The first of these secures the window against being opened; the second takes up any lost motion between the two sash rails and prevents them from rattling; and the third pushes the sashes into close abutment with the casings and prevents these surfaces from rattling.

With the several ends heretofore set forth in view my invention consists and resides in the construction and the several combinations of elements hereinafter fully explained and set forth and then recited in the claims.

In order that those skilled in the art to which my invention appertains may fully understand its construction and method of operation, I will describe the same in detail, reference being had to the accompanying drawings, which form a part of this specification, and in which,

Figure 1, is a plan view of two sash rails with my improved lock thereon and open. Fig. 2, a similar view with the lock closed. Fig. 3, a bottom plan with the parts in their open position. Fig. 4, a like view with the parts in their closed position. Fig. 5, a perspective showing the two parts of the fastening for the rear sash. Fig. 6, a detail bottom plan of the part for the front sash with the slide-bolt removed. Fig. 7, a view like Fig. 6, but with the lever and bolt in their locked position. Fig. 8, a side elevation of the parts adapted to be mounted on the front sash. Fig. 9, a detail view of the locking lever. Fig. 10, a front elevation of the plate 15.

The same numerals denote the same parts in all the figures.

The base plate for the rail of the lower sash is designated by 1 and has upon its top a smooth flat surface upon which the locking lever is mounted. At the center of this surface is an opening which is shown in the inverted plan view Fig. 6; the edges of this opening consist of a major curve 2 and a minor curve 3 opposed thereto, and between these are abutments or shoulders whose purpose will presently be explained. One of these projecting shoulders I denote by 4 and the other by 5.

On the flat top of the base, as above stated, is the locking lever 6 whose forward end carries a depending hook 7 and whose rear end constitutes the handle 8 for swinging it. From the lower face of this lever two round pins 9 and 10 depend, and these are of such size and so placed that they lie against the curves 2 and 3 above described, as is shown at Fig. 6. The pin 10 extends downward only to the bottom of the plate, but the larger pin 9 projects still farther downward and passes through an elongated hole 11 formed in the center of a sliding bolt 12, which bolt lies and is adapted to slide in a recess formed in the bottom of the base plate for its accommodation, as is shown at Figs. 3 and 4. The nose or forward end of this bolt is cut away obliquely at one side, as seen at 13. The end of the pin 9 is designed to be headed over on the bottom of the bolt or secured by a rivet or pin.

The parts just described constitute that member of the fastener which is secured on the inner sash-rail. The complementary member of the lock comprises a housing 14 having screw-holes in its ends, and cut away at its front edge, and a plate 15 somewhat shorter than the interior of the housing and having its extremities notched or slotted, as at 16, so as to coincide with the screw-holes in the housing. For a purpose presently to be explained, the interior wall of the housing and the top of the plate 15 are serrated or

notched as at 17, Fig. 5. The plate 15 is recessed or cut away at its forward end, as seen at 18, Figs. 3 and 5, and so as to form an oblique shoulder 19 said plate carries a hooked locking lug 20, whose rear side is curved for co-operation with the hook on the locking lever.

In the operation of my invention the member of the fastener adapted to fit on the front rail is first screwed in position with the edge of the base plate close to the edge of the rail. The complementary member is then placed in position, as seen at Figs. 1 and 2, but before the screws are set home the hook-carrying plate may be adjusted longitudinally in the housing as required: when so adjusted and the screws set down firmly it will be held in position by the engagement of the opposed serrated faces above referred to.

In locking a window having this fastener, the lever is turned from the position shown at Fig. 1 to that shown at Fig. 2. The hooked end of said lever passes behind the curved face of the lug and thereby draws the sashes together after the manner of a cam. The first part of the swinging movement of the lever is performed about the pin 10 as a center, and thereby the longer pin 9 which engages the sliding bolt, as seen at Fig. 4, is caused to project the latter outward until said pin 9 reaches and is stopped by the shoulder 4, after which the remaining movement of the lever takes place about the pin 9 as a center and the shorter pin 10 moves from the position in which it appears at Fig. 6 to the other end of the short curve 3 and rests against the shoulder 5, as is shown in Fig. 7. When the pins have been carried to this position they are so nearly in line that no power applied to the sliding bolt could force it back, and it is therefore locked. In its forward or outward movement as effected by the lever the oblique face of the sliding bolt engages the opposed oblique face on the plate 15, and its continued movement will thrust both sashes apart and jam each of them tightly against one of the casings so that all lost motion will be taken up and the sashes cannot rattle. As some window sashes are fitted closer in the casings than others, it is desirable that the extent of the end thrust accomplished by the oblique nose of the bolt may be varied and this is the purpose of the adjustability which has been described as existing between the plate 15 and its housing.

In this my invention I do not wish to be confined to the precise details of construction which I have herein shown and described, since many minor changes may be made therein without departing from the essentials of my invention as recited in the clauses of claim here following.

I claim—

1. The base plate having the central opening of the outline described, in combination with the lever having two pins depending through said opening and forming alternately a pivotal point for the lever, and a sliding bolt connected to and movable by one of the pins.

2. The base plate, having the central opening whose edges comprise two opposed curved edges with stops between them, in combination with the lever having two depending pins one bearing against one curve and the other against the opposite curve, and the sliding bolt seated in the base plate and having operative connection with one of said pins, substantially as specified.

3. The combination in a sash fastener with the base plate having the swinging lever and the sliding bolt, of a housing adapted for attachment to the rear sash and an adjustable locking plate contained and movable within the housing, substantially as specified.

4. The combination with the housing for attachment to the rear sash, of the locking plate 15 adjustably arranged within said housing and provided with means of engagement therewith, whereby the fastening screws secure the two parts together and to the sash rail.

5. In a sash fastener, the combination with the base plate, of the swinging hook-ended lever, and the oblique nosed sliding bolt beneath said lever and operated thereby, and the member for the rear sash comprising a curved-faced locking lug for engagement by the hook, and an oblique sided bolt recess beneath said lug, the whole arranged substantially as and for the purpose specified.

6. The housing for the rear sash having screw holes and a serrated interior surface, in combination with the locking plate having a correspondingly serrated surface, having also openings corresponding to the screw holes, said plate adapted to fit within the housing, substantially as specified.

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

JOSEPH C. HAUSER.

Witnesses:

WILLIAM C. PERKINS,

JAMES T. MCNEIL.