Feb. 15, 1927. 1,617,813

T. C. JUDGE

SASH FASTENER

Filed March 15, 1926

Fig. 1.

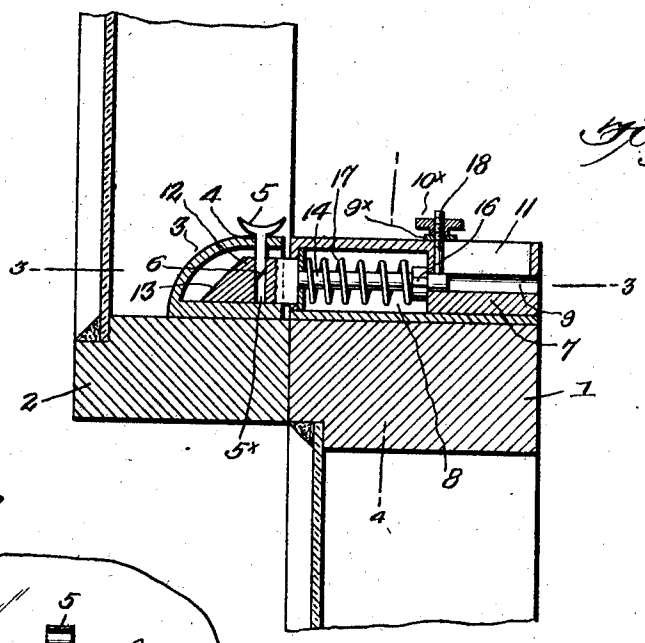


Fig. 2.

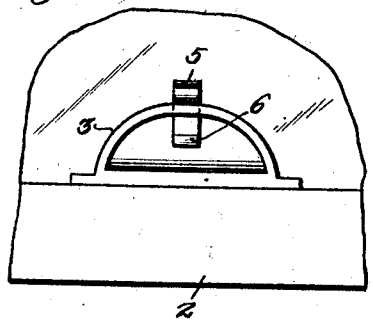
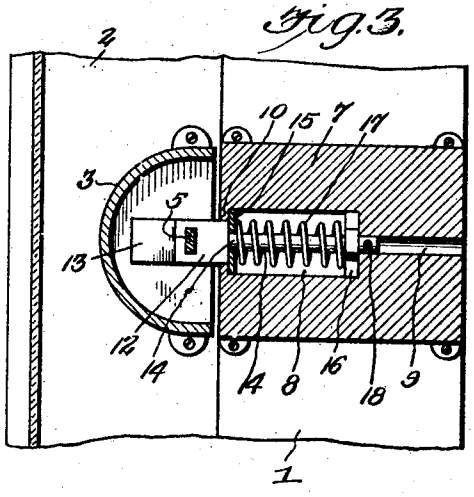


Fig. 3.



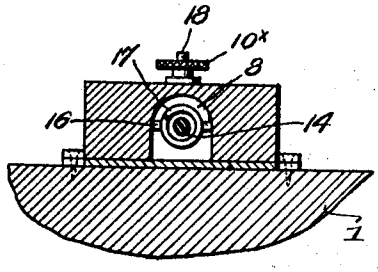


Fig. 4.

Inventor

T. C. Judge,

By Clarence A. O'Brien

Attorney

Patented Feb. 15, 1927. 1,617,813

UNITED STATES PATENT OFFICE.

THOMAS CHARLES JUDGE, OF NEW BRUNSWICK, NEW JERSEY.

SASH FASTENER.

Application filed March 15, 1926. Serial No. 94,859.

My present invention pertains to sash fasteners, and contemplates the peculiar and advantageous sash fastener hereinafter described and definitely claimed, whereby sashes may be expeditiously and easily fastened and secured together and whereby when desired either sash may be freely moved relative to the other without interference from parts of the fastener.

In the accompanying drawings, forming part of this specification:—

Figure 1 is a vertical section showing portions of two sashes equipped with the construction constituting the best practical embodiment of my invention of which I am aware.

Figure 2 is a fragmentary elevation showing the upper sash and the parts of my improvement complementary to said sash.

Figure 3 is a horizontal section taken in the plane indicated by the line 3—3 of Figure 1.

Figure 4 is a vertical transverse section taken in the plane indicated by the line 4—4 of Figure 1.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

I show in Figure 1 a portion of a lower slidable sash 1, and I also show in said figure a portion of an upper slidable sash 2.

In accordance with my invention a housing keeper member 3 of appropriate metal is superimposed upon and fixed to the lower rail of the sash 2, the said housing and keeper member being preferably shaped as shown, being open at its inner side, and being provided in its upper wall with a vertically disposed aperture 4, said aperture 4 being designed for the reception of the shank of a gravitational locking pin 5, and said pin 5 having a beveled lower end 6 and also having a head at its upper end, preferably, though not necessarily, shaped as illustrated. The shape of the head of the pin 5 is advantageous inasmuch as it enables an operative within a room to readily lift the pin 5 out of the housing keeper 3 when desired.

Also in accordance with my invention a frame 7 is superimposed upon and fixedly connected to the crown rail of the lower sash 1. The said frame 7 is provided with a chamber 8, with a bore 9 which extends longitudinally inward from said chamber 8, with a reduced aperture 10 at the outer end of the chamber 8, and with a longitudinal vertically disposed slot 11 above and in communication with the bore 9. Movable to the aperture 10 of the frame 7 is a bolt head 12, beveled at 13, and it will be noted that the said bolt head 12 is fixed to a shank 14 surrounding which is a washer plate 15. Surrounding the shank 14 and interposed between the washer plate 15 and an abutment 16 in the frame 7 is a coiled spring 17 which operates to thrust the bolt head 12 outwardly and normally and yieldingly retains the said bolt head 12 in the relative position shown in Figures 1 and 3. The shank 14 is guided in the abutment 16 and is provided at its rear end with a portion 18 designed to move rectilinearly in the bore 9. Connected to the rear end of the bolt shank 14 and extending through and movable in the slot 11 is a threaded pin 18, the said pin 18 being equipped above the frame 7 with a washer $9^{\times}$ and also equipped with a nut $10^{\times}$, the said nut $10^{\times}$ having by preference a knurled perimeter as illustrated.

When it is desired to freely move either of the sashes 1 and 2 relative to the other and without interference from my novel fastener, it is simply necessary for the person in authority to loosen the nut $10^{\times}$ and retract the bolt head 12 until said bolt head 12 is entirely housed in the frame 7, whereupon the nut $10^{\times}$ is tightened to adjustably fix the bolt head in the position indicated. When it is desired to fasten the sashes in closed position at which time the housing keeper 3 is coincident with the bolt head 12 it is simply necessary to loosen the nut $10^{\times}$ when the spring 17 will operate to promptly force the bolt head 12 into the housing keeper 3. In the latter position of the parts the nut $10^{\times}$ is again tightened, by preference, and for the sake of greater security the pin 5 is utilized for the strong retention of the bolt head 12 in the keeper 3; it being noticed in this connection that notwithstanding the arrangement of the pin 5 in the keeper 3, the bolt head 12 is adapted incident to its entry into the keeper 3 to raise the pin 5 until said pin is coincident with the vertical aperture $5^{\times}$ in the bolt head 12, whereupon the head of the pin 5 will bring up against the top of the keeper 3 and the shank of the pin will be socketed in the said aperture $5^{\times}$ of the bolt head.

Manifestly with the pin 5 positioned as shown in Figure 1 it is unnecessary to tighten the nut $10^{\times}$ though the latter expedient may

be resorted to when deemed necessary. As a matter of fact, however, it is best to leave the nut 10^{x} loose for them when the pin 5 is lifted out of engagement with the bolt head 12, the bolt head 12 may be retracted against the action of the spring 17 for the disconnection of the two sashes, and then by tightening of the nut 10^{x} the bolt head 12 may be secured in its idle position entirely within the frame 7 and so that the bolt head 12 will not interfere in any measure with the free movement of the sashes in conventional manner with respect to each other.

It will be readily appreciated from the foregoing that in addition to the practical advantages ascribed to my novel sash fastener, the fastener is simple and inexpensive in construction, is well adapted to withstand rough usage, and when nickel plated or otherwise embellished is calculated to enhance rather than detract from the neat appearance of sashes.

I have specifically described the preferred embodiment of my invention in order to impart an exact understanding of said embodiment in all of its details. I do not desire, however, to be understood as limiting myself to the specific construction disclosed, my invention being defined by my appended claim within the scope of which modifications may be made without departure from my invention.

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

In a sash fastener, a frame adapted to be fixed on the crown rail of a lower slidable sash and having a chamber and an aperture in the forward wall of said chamber and also having a bore communicating with and extending rearwardly from the chamber, and a longitudinal vertical slot in communication with said bore, a bolt having a head movable through the said aperture in the forward wall of the chamber and also having a shank movable in the chamber and said bore, a spring in said chamber and about the shank of the bolt and arranged to force the bolt forwardly, a threaded pin connected to the rear portion of the bolt shank and disposed and movable in the longitudinal vertical slot of the frame, and a nut mounted on said pin and adapted to be set against said frame.

In testimony whereof I affix my signature.

THOMAS CHARLES JUDGE.