Dec. 22, 1953 O. L. TYE 2,663,585

SCREEN DOOR SAFETY LATCH

Filed April 3, 1950

Fig. 1

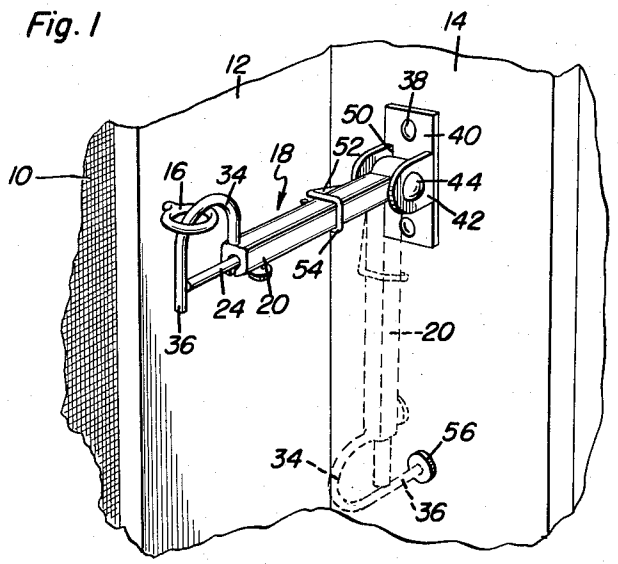
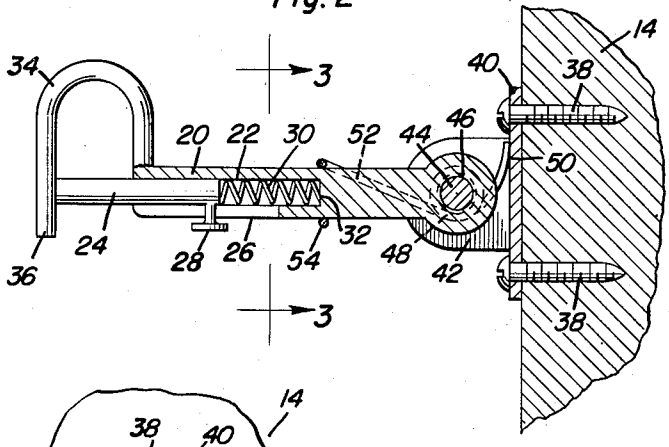


Fig. 2



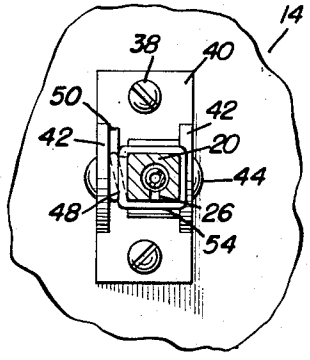


Fig. 3

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SCREEN DOOR SAFETY LATCH

Opal Lee Tye, Pineville, Ky.

Application April 3, 1950, Serial No. 153,642

1 Claim. (Cl. 292—106)

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This invention relates to a safety latch especially designed for use on a screen door and has for its primary object to prevent the removal of the latch and opening of the screen door from the outside of the door when the latch is in an operative position. The present latch is designed to make it impossible for one to insert a flat object, such as a knife, between the door jamb and the screen frame in order to lift the latch from the eye keeper on the screen frame.

Another object of this invention is to provide a safety latch and a means for pivotally mounting the same upon a door jamb or wall in such a manner that the latch is urged downwardly towards the jamb or the wall so that the latch will not rattle and injure the jamb or wall when not in use.

A further important object of this invention is to provide a safety latch of the character described which is relatively simple in design and construction, inexpensive to manufacture in large quantities, simple to assemble upon a door jamb or wall, and very easy to operate both for the latching and unlatching operations.

Yet another object of this invention is to provide a screen door safety latch comprising a spring projected, sliding bolt snap hook adapted to engage an eye screw on a screen door, means for pivotally securing said hook to a wall, and resilient means normally urging said hook downwardly against the wall.

These, together with various ancillary objects and features of the invention which will later become apparent as the following description proceeds, are attained by the device, a preferred embodiment of which has been illustrated, by way of example only, in the accompanying drawings, wherein:

Figure 1 is a perspective view of the present safety latch shown assembled upon a screen frame and a door jamb;

Figure 2 is a longitudinal sectional view through the latch, some parts being shown in elevation; and

Figure 3 is a sectional view taken substantially on the plane of section line 3—3 of Figure 2.

Specific reference will now be made to the drawings. In the several views in the accompanying drawings and in the following specification similar reference characters indicate corresponding elements throughout.

Indicated generally at 10 is a screen retained in a frame 12 adapted to close upon a door jamb or wall 14. The screen frame is provided with a conventional eye screw or keeper 16 and the present safety latch, indicated generally at 18, is adapted to engage the keeper 16 and retain the screen in a closed position upon the door jamb 14.

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The safety latch is, in effect, a spring-projected, sliding bolt, snap hook which includes a shank 20 having a bore 22 extending partially therethrough and a bolt or plunger 24 slidably positioned within the bore. At the bottom of the shank is an elongated slot 26 which is communicative with the bore and through which extends a finger button 28 secured to or integral with the rear end 14 of the bolt 24. A coil spring 30 is positioned within the bore of the shank and is interposed between the rear end of the bolt 24 and a shoulder 32 in the shank, the spring being tensioned to normally urge the bolt outwardly of the bore. Integral with the forward end of the shank 20 is a substantially U-shaped member 34 which is adapted to engage the eye keeper 16 on the screen frame which has a portion 36 which extends beyond the bottom edge of the shank 20 and which is adapted to coact with the forward free end portion of the bolt as will be readily understood with reference to Figures 1 and 2, in particular.

Secured by suitable screws 38 to the door jamb or wall 14 is a flat bracket 40 having parallel lateral ears 42 and secured between the ears 42 is a double-headed or peened pivot pin 44. The rear end of the shank 20 is provided with a lateral bore 46 which loosely receives the pivot pin 44 so that the latch is pivotal in a vertical plane about the pivot pin 44. Wound about the pivot pin 44 between the shank and one of the ears 42 is a spring 48 which has a rearwardly and upwardly extending portion 50 that presses against the bracket 40. The spring 48 also includes a portion 52 which extends along one side of the shank 20 and is provided at its free end with a substantially rectangular coil 54 which embraces the shank 20, the spring 48 normally urging the latch downwardly and against the jamb or wall 14, as shown clearly in dotted lines in Figure 1.

In use, the latch is raised against the action of the spring 48 and the bolt 24 is slid rearwardly against the action of the coil spring 30 by means of the button 28. The U-shaped member 34 is then made to engage the keeper 16 on the screen frame 12 and the bolt is released to effect the latching operation. When the latch is opened and removed from the keeper 16, it is merely dropped and the spring 48 urges it against the jamb or wall. A tack 56 is secured to the jamb to engage the extension 36 and prevent the same from injuring the jamb. It will also be seen that

the coil 54 is made to embrace the shank 20 in such a position that the free end thereof faces the screen frame to prevent accidental injury to the hand of the operator. It will be understood that the latch and keeper may be reversed so that the latch 18 will be secured to the screen frame along with the tack 56 while the keeper 16 will be secured to the door jamb.

In view of the foregoing description taken in conjunction with the accompanying drawings, it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention, the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and within the scope of the appended claim.

Having described the invention, what is claimed as new is:

For use with a screen door and a door jamb operatively associated with said screen door, said screen door having an eye screw secured thereto; a safety latch comprising an elongated shank having a bore therein, a hook on one end of said

shank, a spring-projected sliding bolt in said bore and normally engaging said hook, a bracket having a mounting plate adapted to be secured to said door jamb, said plate having a pair of spaced parallel laterally extending ears, a pivot pin connected to said ears the other end of said shank being rigidly and pivotally mounted on said pivot pin, a coil spring mounted on said pivot pin, one end portion of said spring being disposed between said ears and abutting said mounting plate, the opposite end portion of said spring extending alongside said shank to a position substantially midway of the ends of the shank where it engages the shank by being bent around the shank, said spring urging said shank downwardly toward said door jamb.

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