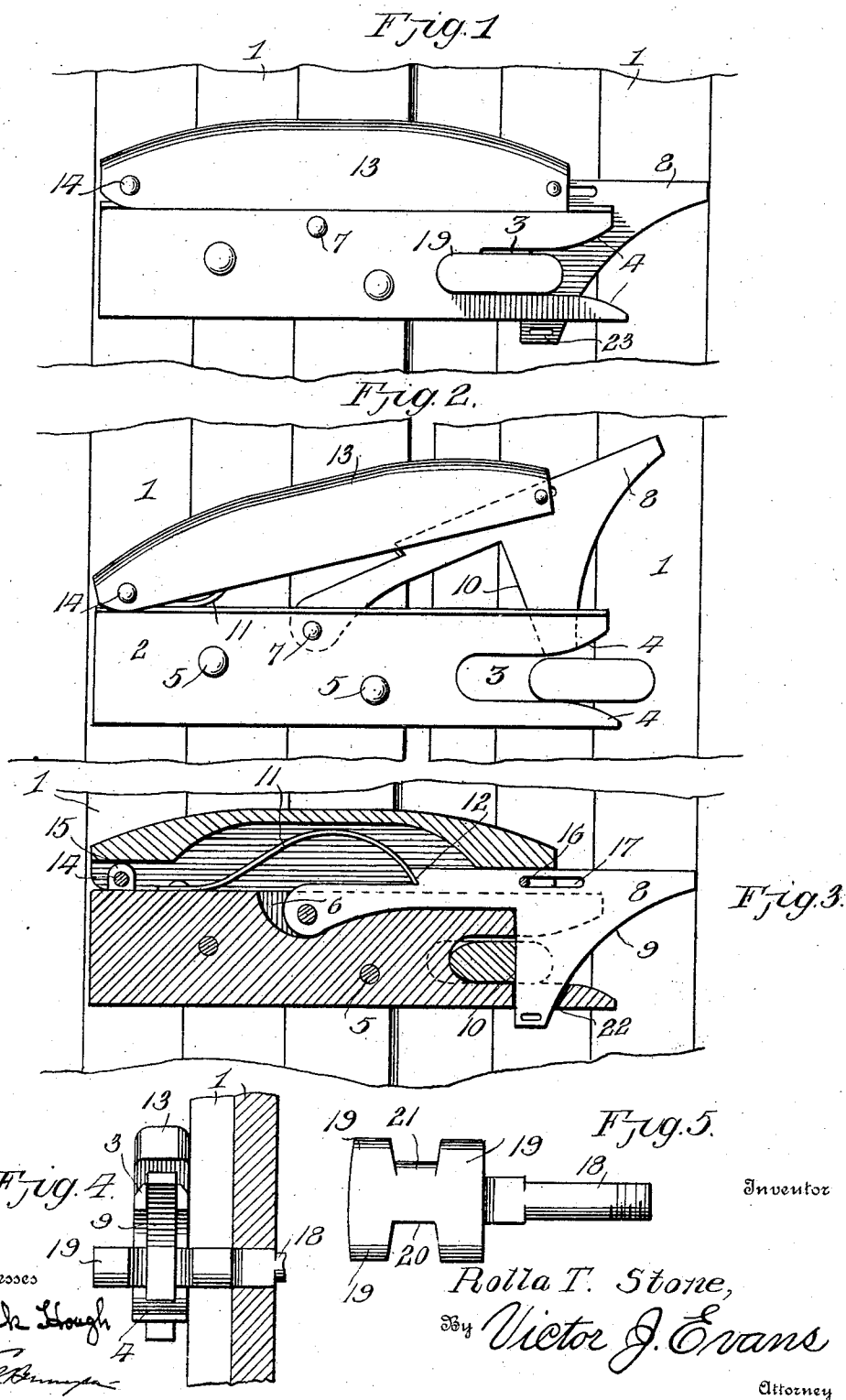


No. 869,202.

PATENTED OCT. 22, 1907.

R. T. STONE.
SLIDING DOOR FASTENER.
APPLICATION FILED FEB. 26, 1907.



UNITED STATES PATENT OFFICE.

ROLLA T. STONE, OF KEYSTONE, WASHINGTON.

SLIDING-DOOR FASTENER.

No. 869,202.

Specification of Letters Patent.

Patented Oct. 22, 1907.

Application filed February 26, 1907. Serial No. 359,376.

To all whom it may concern:

Be it known that I, ROLLA T. STONE, a citizen of the United States of America, residing at Keystone, in the county of Adams and State of Washington, have invented new and useful Improvements in Sliding-Door Fasteners, of which the following is a specification.

This invention relates to sliding door fasteners, and one of the principal objects of the same is to provide a simple and efficient automatic latch and lock for sliding doors which will securely lock the doors closed against operation from the outside, or from the opposite side of the doors to which the lock is secured.

Another object of the invention is to provide a pivoted spring operated latch which will ride upward upon a stationary part of the latch and be forced downward behind it by means of a spring.

Still another object of my invention is to provide means for attaching a seal to the latch for use on car doors and other places requiring a sealed lock.

These and other objects may be attained by means of the construction illustrated in the accompanying drawing, in which:

Figure 1 is a side elevation of a lock made in accordance with my invention, and shown in locked position upon the inside of a pair of sliding doors, the latter being shown broken away. Fig. 2 is a similar view showing the lock or latch in a position which it assumes during the movement of one of the doors toward the other. Fig. 3 is a longitudinal vertical section through the lock, the latch bar being shown in locking position. Fig. 4 is an end view of the lock. Fig. 5 is a plan view of the stationary bar or keeper.

Referring to the drawing for a more particular description of my invention, the numerals 1 designate the two sliding doors which may be of the usual or any suitable type. Secured to one of these doors is the main bar 2 of my lock, said bar having a recess or open slot 3 at one end thereof, and outwardly curved or flaring members 4 at each side of said recess 3. The bar 2 is secured to the door by means of suitable bolts 5. Upon the upper edge of the bar 2 a recess 6 is provided, and pivoted in this recess upon a pin 7 is the latch member 8, said latch member having a curved front surface 9, and a square shoulder 10, the purposes of which will presently appear. A spring 11 is secured to the top of the bar 2, and its end is seated against a shoulder 12 formed on the latch member 8, the tendency of said spring being to throw the latch member down in position shown in Fig. 3. A cover member 13 is pivoted upon a pin 14 passing through a lug 15 formed on the bar 2, said cover being hollow or recessed to inclose the spring 11 and to protect the same, the front end of said cover having a sliding connection with

the latch member 8 by means of a cross-pin 16 sliding in a slot 17 in the latch plate 8. The stationary bolt or bar 18 is secured to the other sliding member of the door, said bolt having a head provided with oppositely projecting portions 19, a plain shoulder 20 and a rounded shoulder 21, as shown more particularly in Fig. 5.

The operation of my invention may be briefly described as follows: As one of the door members moves toward the other, the curved surface 9 of the latch member rides up on the curved shoulder 21 of the stationary bolt or member 18 until the plain shoulder 10 reaches the shoulder 20 on said bar when the spring 11 throws the latch member 8 down to the position shown in Figs. 1 and 3, the end of the latch member 8 passing through an aperture 22 in the member 4 of the bar 2. In this position the two doors are firmly locked together and cannot be unlocked from the outside. A slot 23 in the lower end of the latch member 8 may be utilized for connecting a seal whenever such a device is desired.

From the foregoing it will be obvious that a latch or lock made in accordance with my invention is comparatively simple in construction, may be quickly applied to sliding doors, is automatic in its locking action, and is reliable and efficient in use.

Having thus described the invention, what I claim is:

1. A sliding door fastener comprising a recessed bar, a latch member pivoted to said bar and provided with a curved and a plain shoulder, a spring bearing against said latch member, a cover pivoted to said bar and to said latch member, and a stationary bolt having a curved shoulder and a plain shoulder for coöperation with the latch member, substantially as described.
2. A sliding door fastener comprising a recessed bar, a latch member pivoted thereto, said latch member having a curved front shoulder and a plain rear shoulder, a cover pivoted to the bar, and slidably connected to the latch member, a spring for normally holding the latch member down, and a stationary bar or bolt provided with a curved shoulder and a plain shoulder, substantially as described.
3. A sliding door fastener comprising a bar having a recessed end, and oppositely flaring members, a latch pivoted in a recess in said bar and provided with a curved and a plain shoulder, a spring bearing against said latch member to normally hold it down, a cover pivoted to said bar and slidably connected to said latch member by means of a pin and slot connection, one of the flaring members on said bar having an aperture therein through which the end of the latch bar passes, said latch bar being provided with a slot for the attachment of a seal, substantially as described.

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

ROLLA T. STONE.

Witnesses:

C. P. DEY,
D. W. CIRCLE.