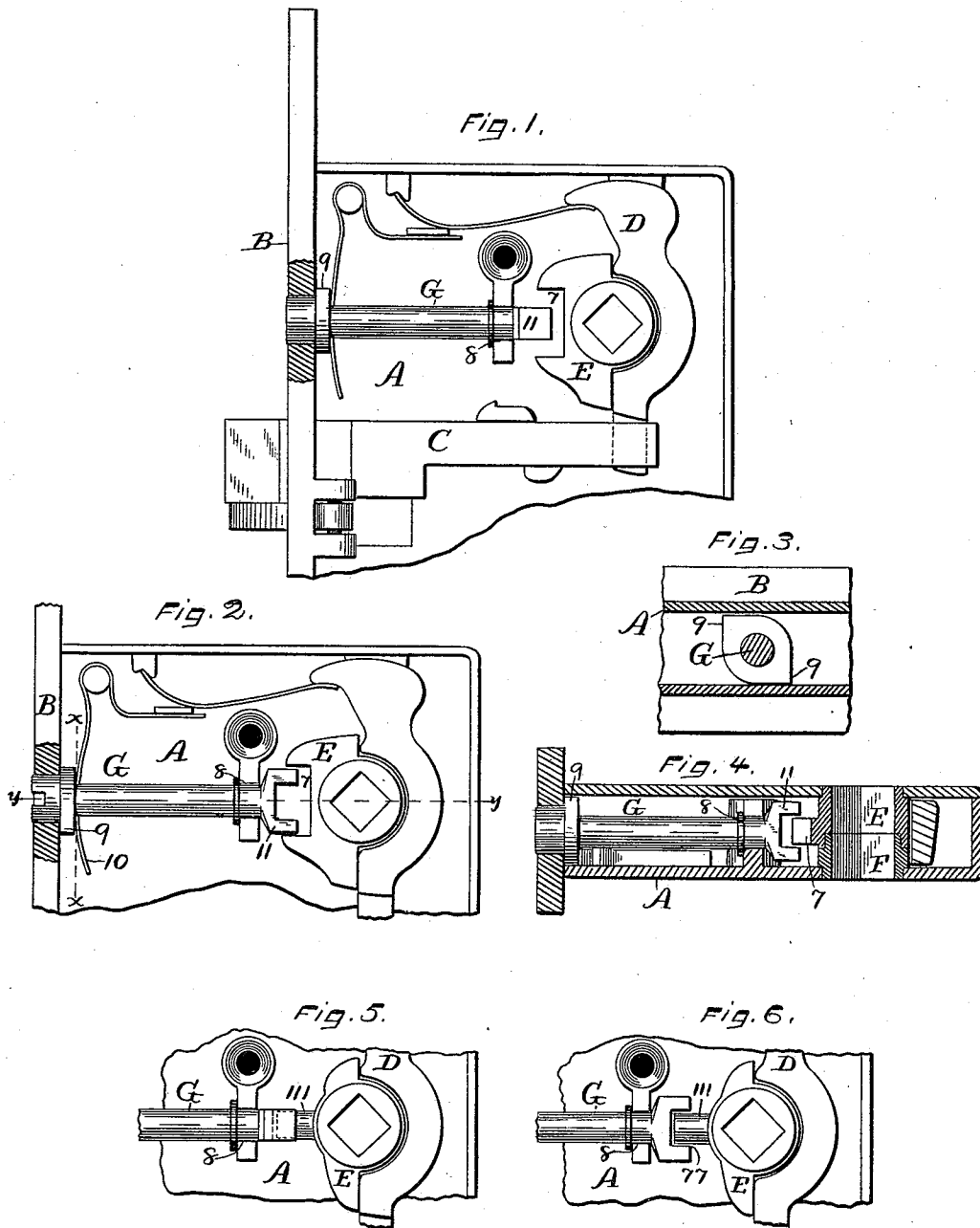


(No Model.)

T. LYONS.  
STOP FOR LATCHES.

No. 450,331.

Patented Apr. 14, 1891.



Witnesses,  
John Edwards & Co.  
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# UNITED STATES PATENT OFFICE.

THOMAS LYONS, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE  
RUSSELL & ERWIN MANUFACTURING COMPANY, OF SAME PLACE.

## STOP FOR LATCHES.

SPECIFICATION forming part of Letters Patent No. 450,331, dated April 14, 1891.

Application filed January 30, 1891. Serial No. 379,681. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS LYONS, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Stops for Night-Latches, of which the following is a specification.

My invention relates to improvements in stops for night-latches, and the objects of my improvement are simplicity of construction and efficiency in operation.

In the accompanying drawings, Figure 1 is a front elevation of so much of a latch as is necessary to show my improvement, the cap-plate being removed and a portion of the face-plate being in section. Fig. 2 is a like view of a portion of the same with the hub locked by the stop. Fig. 3 is a transverse section on line *x x* of Fig. 2, looking toward the face-plate. Fig. 4 is a horizontal section on line *y y* of Fig. 2, the stop being shown in elevation. Fig. 5 is a face view of the hub and stop with a portion of the case, showing my improvement embodied in another form; and Fig. 6 is a like view of the same with the hub locked by the stop.

A designates the case; B, the face-plate; C, the latch-bolt; D, the latch-lever, and E the outside half of the divided hub, the other half of which is designated by the letter F in Fig. 4. These are all substantially the same as in ordinary latches. The outer half E of the hub is provided with a flange having a locking-notch 7, substantially the same as in ordinary latches, excepting that it is somewhat wider.

G designates a rotary stop having one bearing in the face-plate B and another bearing 8 in the lock-case which supports said stop in position so that it can be partially rotated when desired, and at the same time it is confined against lateral movement. The outer or face-plate end of said rotary stop is provided with any suitable means for turning it—as, for instance, a slot for the application of a driver. Upon the inside of the face-plate I form on or attach to the body of the rotary stop G diagonal stops 9 9, arranged diametrically opposite each other and acting upon the front and rear plates of the case to limit

the rotary motion of the stop G to one-quarter of a revolution. This is best seen in Fig. 3, in which position the stop is free to be rotated one quarter-turn to the left, but cannot be turned to the right.

In order to prevent the bolt from accidental rotation when turned to its limit in either direction, I provide the friction-spring 10, which presses against the piece on which the stops 9 9 are formed with sufficient friction to hold it in place. At the inner end of the rotary stop G there is a flattened head 11, the width of which in its greatest dimensions is sufficient to substantially fill the notch 7 in the front part of the hub when the widest part stands in a vertical position, as shown in Fig. 2. The middle portion of this head may be cut away entirely or made so thin as not to interfere with the turning of the hub when the stop is turned with its widest part in a horizontal position, as shown in Figs. 1 and 4. In this position the hub is free to oscillate and operate the latch; but when the bolt is turned into the position shown in Fig. 2 the hub is locked.

Instead of having the notch in the hub and the head or locking projection on the rotary stop, their position may be reversed, such a reversal being shown in Figs. 5 and 6. In these views the locking projection 111 is formed upon the latch-hub, and is of a cylindrical form, while the notch 77, Fig. 6, for engaging said projection, is formed in the inner end of the rotary stop-bolt. In this form the cylindrical projection 111 should be substantially in axial alignment with the rotary stop-bolt G. When the bolt is turned to bring the notch through it into a vertical position, as shown in Fig. 5, the hub is free to oscillate for operating the latch, the projection 111 passing unobstructedly through the notch. When the rotary stop is turned so that the slot through it extends in a horizontal position from front to rear, as shown in Fig. 6, the hub is locked, as the projection then engages the walls at the top and bottom of said slot and prevents it from turning.

I am aware of the latch shown and described in the application of Henry E. Russell, Jr., Serial No. 370,851, filed November 10, 1890, and I hereby disclaim the same.

I claim as my invention—

1. The herein-described stop for a latch, consisting of a divided hub and a rotary stop having, respectively, a locking projection and  
5 notch, said stop being confined in bearings against moving longitudinally and transversely to its axis, but free to rotate one quarter-turn, the same combined substantially as set forth, whereby one position in the rotary  
10 motion of said stop will permit the free action of said hub, and a position at one-quarter of a revolution from said first position will stop the free action of said hub by the engagement of said locking projection and  
15 notch, substantially as described, and for the purpose specified.

2. The herein-described stop for a latch, consisting of a divided hub and rotary stop

having, respectively, a locking projection and notch which are brought into and out of engagement by turning said stop a quarter-turn, and diagonally-opposite stop-shoulders on said bolt for engaging with the plates of the case to limit the motion of said stop, substantially as described, and for the purpose specified.

3. In a latch, the combination of the latch-hub, the rotary stop adapted for locking and unlocking said hub by a quarter-turn, and a frictional spring for holding said stop against  
30 accidental rotation, substantially as described, and for the purpose specified.

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Witnesses:

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