T. LELAND.

SPRING CATCH AND HOOK.

APPLICATION FILED DEC. 15, 1917.

1,293,483. Patented Feb. 4, 1919.

Fig. 1.

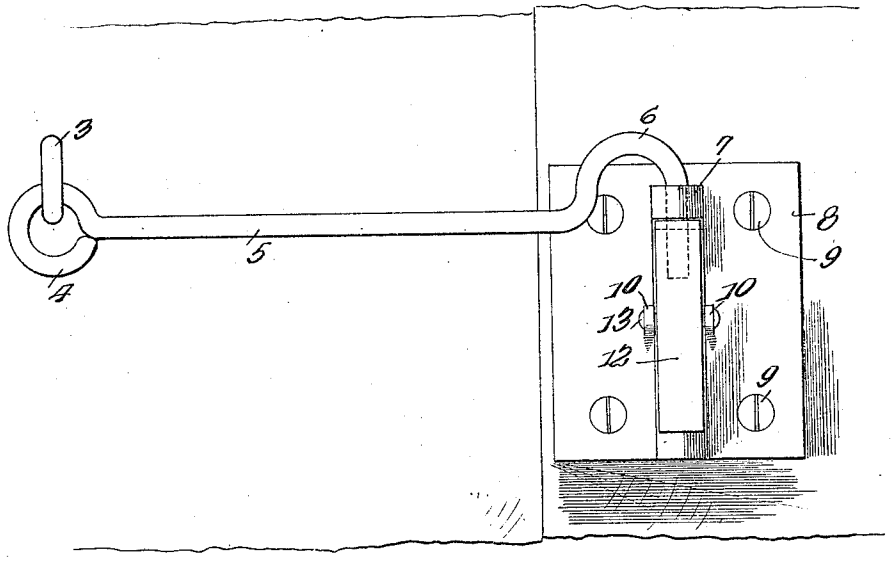
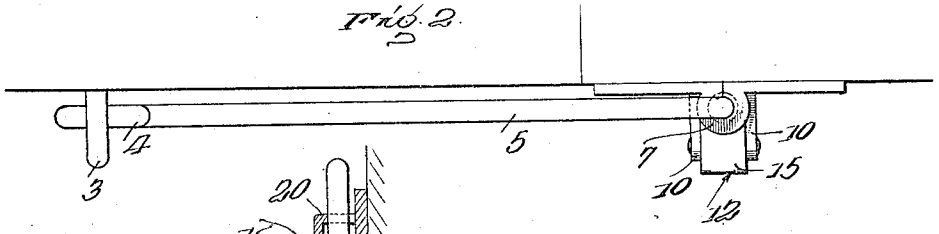


Fig. 2.



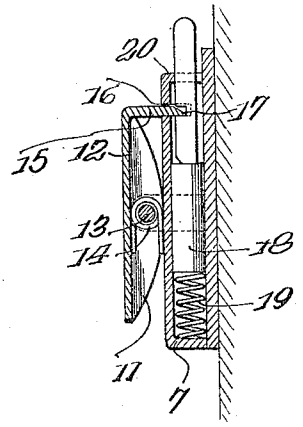


Fig. 3.

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SPRING CATCH AND HOOK.

1,293,483. Specification of Letters Patent. Patented Feb. 4, 1919.

Application filed December 15, 1917. Serial No. 207,292.

To all whom it may concern:

Be it known that I, THORSTEIN LELAND, a subject of the King of Norway, residing at Ernfold, in the Province of Saskatchewan and Dominion of Canada, have invented certain new and useful Improvements in Spring Catches and Hooks, of which the following is a specification.

This invention relates to certain new and useful improvements in fastening devices such as commonly employed for securing doors, gates and other closures and in particular the invention relates to fastening devices of the type known as hasp fasteners.

The principal object of the invention resides in the provision of a casing or keeper adapted to receive one end of a latch member or hasp, and a catch engageable with the end of the hasp or latch to retain the same in locked position within the casing.

Another object of the invention is to provide a keeper adapted to receive one end of a latch member and having associated therewith means for locking the end of the latch member therein and means for ejecting the end of the latch upon release of said locking means.

Another object of the invention resides in the specific construction, arrangement and combination of parts whereby a fastening device is provided which is comparatively simple in construction, will operate reliably and may be placed upon the market at a reasonable cost.

Other objects of the invention as well as the specific arrangement and operation thereof will be more readily understood from the following description and drawings wherein I have set forth a preferred embodiment and in which drawings:—

Figure 1 is an elevational view showing the application of my invention.

Fig. 2 is an edge view of the same, and

Fig. 3 is a sectional view of the casing and catch, the ejecting bolt being shown in elevation.

Referring to the drawings by numerals, 1 designates a movable member such as a door or gate and 2 a stationary member such as a door or gate frame or the wall of a room or building. Carried by the member 1 is an eye bolt 3 to which is pivotally secured the loop end 4 of a latch or hasp member 5. The opposite end of this latch or hasp member is bent to provide a hook 6 which is adapted to be received in the upper end of a casing 7. This casing 7 is closed at its lower end and is adapted to be formed or otherwise secured upon a supporting plate 8 which in turn is fastened by means of the screws 9 or other securing means to the member 2.

Upon opposite sides of the casing 7 are arranged the ears 10 which receive therebetween the side flanges 11 or a pivoted catch member 12 and passing through said ears and side flanges is a pin 13 which forms a pivotal mounting for the catch. A spring 14 surrounds this pin and has one end thereof engaging the casing and its opposite end engaging the catch 12. One end of the catch member 12 is formed with a hook 15 which is adapted to extend into the interior of the casing 7 through a suitable slot 16 formed adjacent the upper end of said casing and is adapted to engage a recess 17 formed in the hooked end of the latch member 5 in order to lock said hooked end against removal from the casing.

An ejecting bolt 18 is mounted for sliding movement in the casing and is adapted to engage the hooked end of the latch member in order to eject the same from the casing when the catch 12 is moved to withdraw the hook 15 from the recess 17. An actuating compressing spring 19 is confined between this bolt and the lower closed end of the casing and normally tends to force the bolt to the upper end of the casing. This upper open end of the casing is provided with an inturned flange 20 which serves as a stop to prevent the bolt from being forced entirely out of the casing by the spring actuating the same.

In the use of the invention the catch 12 is moved against the action of the spring 13 to retract the hook 15 from within the casing. The hooked end 6 of the latch member 5 is inserted in the upper open end of the casing and depresses the ejecting bolt 18 to the position shown in Fig. 3 at which time the latch 12 is released to permit the hook 15 to be engaged in the recess 17. It will therefore be seen that the actuating spring 19 arranged beneath the actuating bolt is compressed to a considerable extent by the downward movement of this bolt and therefore when the hook 15 is disengaged with the recess 17 this spring will drive the bolt upwardly in the casing with sufficient force to eject the hook 6 therefrom.

Although I have shown and described my invention in its preferred embodiment it will be understood that I do not limit myself to the exact construction or arrangement of the parts shown but reserve the right to make such minor changes along this line as I desire providing of course that the changes contemplated come within the scope of the appended claims.

I claim:—

1. A fastener as described, including a casing open at its upper end and provided with a side slot, a latch member mounted independently of said casing and provided with a hooked end adapted to be received in said casing and having a recess formed therein, and a catch member pivotally mounted upon said casing and adapted to enter said slot for engagement with the recess in the hooked end of said latch.

2. A fastener as described, including a casing, a latch member adapted to have one end thereof received in said casing, means for locking the end of the latch member in the casing, an ejecting bolt slidably mounted in the casing and engaging the end of the latch member to eject the latter from the casing upon release of the locking means, and an actuating spring for said bolt, said spring being confined between the bolt and one end of the casing.

3. A fastener as described, including a supporting plate, a casing mounted thereon, a latch member provided with a hooked end having a recess formed therein and adapted to be received in said casing, ears arranged upon opposite sides of the casing, a catch member pivotally mounted between said ears and having one end thereof adapted to project into the casing for engagement with the recess formed in the hooked end of the latch member, an ejecting bolt movably positioned in said casing and engaged with the end of said latch member and an actuating spring positioned beneath said bolt and tending to force the same toward the open end of the casing in order to eject the end of the latch member from said casing upon release of said catch.

4. The combination with a door and a stationary support, of a latch pivotally secured to said door and provided with a hooked end having a recess formed therein, a casing secured to said stationary support to receive the hooked end of said latch, a spring pressed ejecting bolt mounted in said casing and engaging said latch, and a catch pivotally mounted upon the exterior of said casing and equipped with a hooked end engageable with the recess in said latch.

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

THORSTEIN LELAND.

Witnesses:
JULIUS E. GANDER,
FRED MCDONALD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."