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A. W. CHICK.

LATCH.

APPLICATION FILED JAN. 31, 1907.

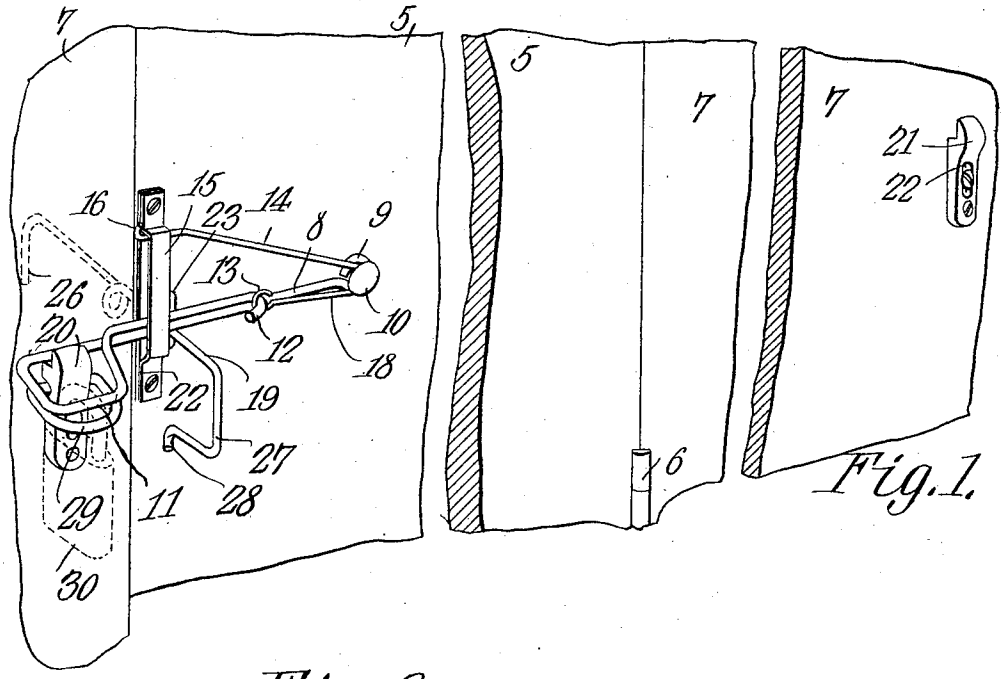


Fig. 1.

Fig. 3.

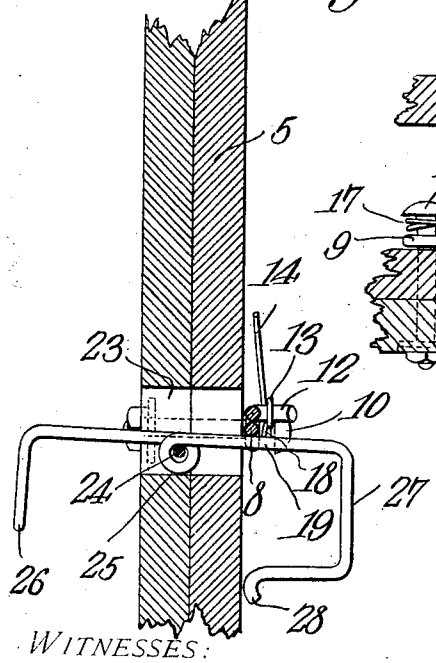


Fig. 2.

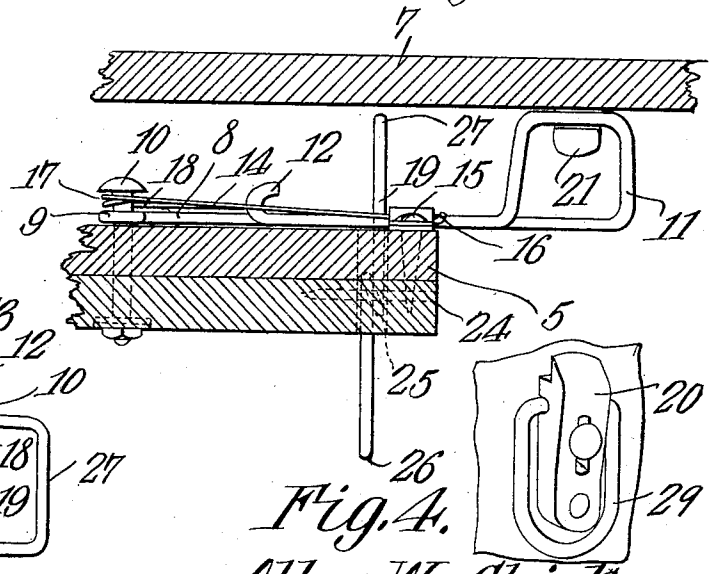


Fig. 4.

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LATCH.

No. 863,262. Specification of Letters Patent. Patented Aug. 13, 1907.

Application filed January 31, 1907. Serial No. 355,117.

To all whom it may concern:

Be it known that I, ALLEN W. CHICK, a citizen of the United States, residing at Lime Spring, in the county of Howard and State of Iowa, have invented a new and useful Latch, of which the following is a specification.

This invention relates to latches for doors and similar closures and has for its object to provide a comparatively simple and inexpensive device of this character by means of which the door may be fastened in both open and closed position.

A further object of the invention is to provide a spring pressed locking latch having a releasing member associated therewith and extending transversely through the door whereby the latch may be moved to released position from either side of said door.

A further object is to form one end of the latch with a terminal loop or eye adapted to register with a staple on the door-casing or frame thereby to permit the attachment of a pad-lock or similar fastening device to assist in holding the door in closed position.

A still further object of the invention is to generally improve this class of devices so as to increase their utility, durability and efficiency.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, and illustrated in the accompanying drawings, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a perspective view of a latch constructed in accordance with my invention showing the door in closed position. Fig. 2 is a transverse sectional view of a portion of the door and frame showing the door locked in open position. Fig. 3 is a vertical sectional view showing the position and construction of the latch releasing member. Fig. 4 is a perspective view of the pivoted locking bail and keeper showing the bail in lowered or inoperative position.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved device is principally designed for use on doors and similar closures and by way of illustration is shown applied to a door of the ordinary construction in which 5 designates the door pivotally mounted at 6 on the frame or casing 7.

Pivotally mounted for vertical movement on the outer face of the door 5 is a spring pressed latch 8 the latter being preferably formed of a single piece of wire or similar material having one end thereof bent to form an eye 9 for the reception of a securing bolt 10 and having its intermediate portion bent to form an angularly disposed loop 11, the wire being thence extended in parallel relation to the body portion 8 and bent laterally to form a terminal hook 12. The hook 12 is spaced from the eye 9 and is adapted to receive the adjacent loop or eye 13 of the spring 14, the latter being coiled around the securing bolt 10 and provided with an upwardly extending arm which passes through a guide 15 and is provided with a terminal outwardly extending lip 16. The intermediate portion or coil 17 of the spring 14 is preferably interposed between the eye 9 at the head of the bolt 10 so that the eye carrying arm 18 of the spring will be disposed substantially parallel with the body portion 8 of the latch and thus yieldably support said latch in engagement with the latch releasing member 19.

Secured to the door-frame or casing 7 is a keeper 20 adapted to engage the latch 8 and thereby lock the door in closed position, there being a similar latch 21 secured to the door frame on the opposite side of the door and adapted to engage the loop 11 of the latch for locking the door in open position. The keepers 20 and 21 are preferably provided with elongated slots 22 so that the same may be adjusted vertically of the door-casing and in proper position to be engaged by the spring latch.

The latch releasing member 19 extends through a transverse slot or opening 23 formed in the door 5 and is pivotally mounted for tilting movement on a pin 24 extending transversely across the slot and threaded through an eye 25 formed in said member. The latch releasing member 19 is preferably cast or otherwise formed of a single piece of metal the opposite ends of which are bent to form terminal handles 26 and 27 which extend on opposite sides of the door so that the spring latch 8 may be operated from either side of the door.

The free edge of the handle 27 is provided with a curved terminal 28 which bears against the adjacent face of the door and serves to assist in preventing tilting movement of the latch releasing member. It will here be noted that the spring pressed latch 8 bears against the member 19 and thus serves to support the curved portion 28 in yieldable contact with the adjacent face of the door.

Pivotally mounted for swinging movement in the keeper 20 is a loop or bail 29 the free end of which normally rests against the door frame or casing 7 but is adapted to be swung upwardly in registration with the loop 11 thereby to permit the attachment of a pad lock or similar fastening device so that the door may be securely locked in closed position.

In order to open the door from the outside it is merely necessary to tilt the handle 27 which releases the latch from the adjacent keeper 20 and thus permits the door to be swung laterally to open position in the usual manner. As the door is swung laterally to open position the loop 11 will engage the latch 21 and thus lock the door in open position. In order to release the latch from engagement with the keeper 21 it is merely neces-

sary to press downwardly on the handle 26 when the free end of the latch may be disengaged from the keeper thus permitting the door to be swung laterally to closed position. The door may be opened from the interior of the room by simply depressing the handle 26 and pressing outwardly on the door as will be readily understood.

Attention is called to the fact that the bolt or fastening device 10 serves to secure both the spring and latch in position on the door while the latter yieldably engages the releasing members so as to hold the same under tension. While the latch is shown applied to a door opening towards the right it is obvious that said latch may be used on a door opening towards the left by disengaging both the latch and the spring and inverting the same.

From the foregoing description it is thought that the construction and operation of the device will be readily understood by those skilled in the art and further description thereof is deemed unnecessary.

Having thus described the invention what is claimed is:

1. The combination with a door and door-frame, of a keeper secured to the door-frame, a bail pivotally mounted on the keeper and movable laterally to operative position a latch pivotally mounted on the door and adapted to engage the keeper, one end of the latch being provided with an angularly disposed loop adapted to register with the bail for the reception of a fastening device.

2. The combination with a door and door-frame, of a keeper secured to the door-frame, a pivoted bail disposed adjacent the keeper, a latch pivotally mounted on the door and adapted to engage the keeper, and a spring for yieldingly supporting the latch in engagement with the keeper, said latch being provided with an angularly disposed loop adapted to register with the bail for the reception of a fastening device.

3. The combination with a door and door-frame, of a keeper secured to the door frame, a spring pressed latch adapted to engage the keeper, and a latch releasing member extending transversely through the door and having its opposite ends provided with operating handles, one of said operating handles being yieldably supported in contact with the adjacent face of the door by engagement with the latch.

4. A latch formed of a single piece of metal having an intermediate portion thereof bent to form a loop and one end extended parallel with the adjacent portion of the wire and bent laterally to form a terminal hook, the opposite end of the wire being extended longitudinally beyond the hook and provided with a terminal attaching eye.

5. A latch having an angularly disposed loop at one end thereof and an attaching eye at the other, and a hook extending laterally from the latch between the eye and loop and having its bill spaced laterally from the adjacent portion of said latch.

6. The combination with a door and frame, of a keeper secured to the door frame, a latch pivotally mounted on the door and having one end thereof terminating in a loop for engagement with the keeper, and a bail pivotally mounted on the keeper and adapted to register with the loop to permit the insertion of a fastening device.

7. The combination with a door and door frame, of a vertically adjustable keeper secured to the door frame, a latch pivotally mounted on the door and having its free end bent to form a terminal loop for engagement with the keeper, and a bail pivotally mounted for swinging movement on the keeper and adapted to register with the loop to permit the insertion of a fastening device.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ALLEN W. CHICK.

Witnesses:
THOS. FARALDSON,
F. W. CLARK.