(No Model.)

A. H. APPLEGATE.

LATCH.

No. 456,008. Patented July 14, 1891.

Fig 1

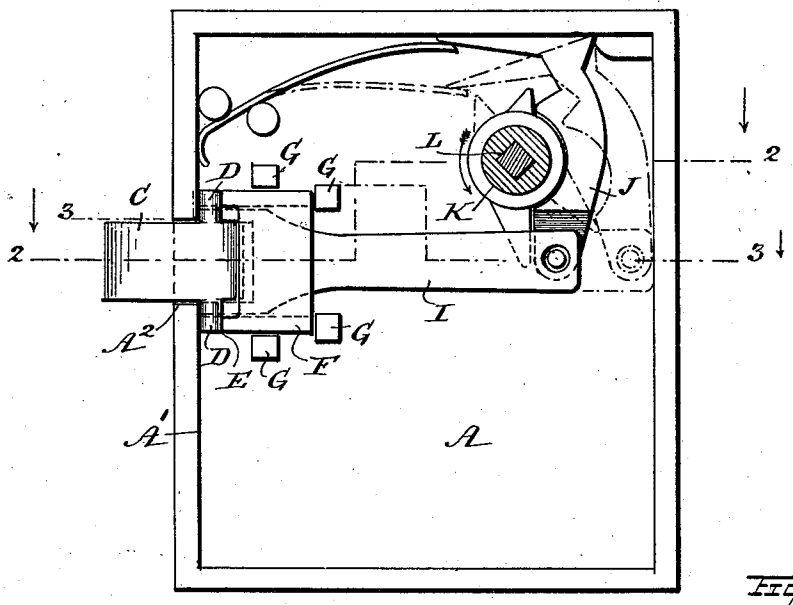


Fig 4

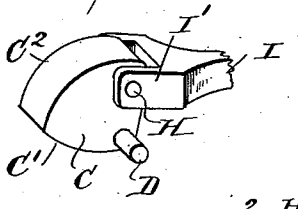


Fig 5

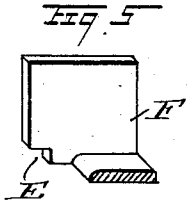


Fig 2

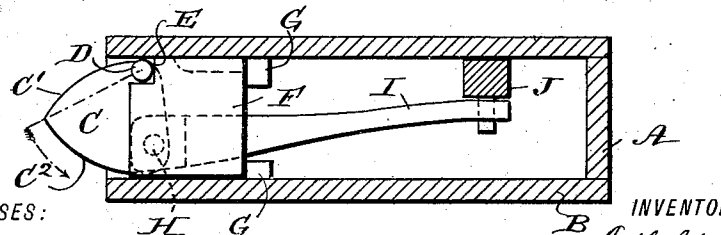


Fig 3

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AMBROSE H. APPLEGATE, OF PHILLIPSBURG, NEW JERSEY.

LATCH.

SPECIFICATION forming part of Letters Patent No. 456,008, dated July 14, 1891.

Application filed October 6, 1890. Serial No. 367,154. (No model.)

To all whom it may concern:

Be it known that I, AMBROSE H. APPLEGATE, of Phillipsburg, in the county of Warren and State of New Jersey, have invented a new and Improved Door-Latch, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved door-latch which is simple and durable in construction, very effective in operation, permits of an easy closing of the door, and can be used on right and left hand doors without turning the lock upside down.

The invention consists of a reversible latch having vertically-extending trunnions journaled in a reversible frame held in the lock-casing.

The invention also consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional face view of the improvement on the line 1 1 of Fig. 2. Fig. 2 is a sectional plan view of the same on the line 2 2 of Fig. 1. Fig. 3 is a like view of the same in a reversed position on the line 3 3 of Fig. 1. Fig. 4 is a perspective view of the latch and its connecting-bar; and Fig. 5 is a perspective view of the pivot-casing for the latch.

The casing A is provided with the usual front plate B, and has one of its sides A′ formed with a notch A^2, through which is adapted to pass the reversible latch C, having sides C′ and C^2, slightly curved and giving, with the back, a triangular shape to the latch. In one corner of the latch C are formed trunnions D, extending vertically and fitted into notches E, formed in a reversible **U**-shaped frame F, held between a number of studs G, secured on the front and back plate of the casing A. The trunnions D also rest against the inside of the side A′ of the casing, and against the inside of the front or back plate, which thus forms part of the bearing for the said trunnions. (See Figs. 2 and 3.) On the latch C are also secured or formed pivot-pins H, arranged in the corner adjacent to that in which the trunnions D are located. (See Fig. 4.) The pivot-pins H are engaged by the forked end I′ of the latch-bar I, pivotally connected with the spring-pressed arm J, actuated by the follower held in the usual manner on the knob-spindle L. When the latter is actuated, the latch C is swung inwardly out of contact with the keeper in the door-casing.

When the latch is applied to a left-hand door, the latch C, the frame F, and the bar I are placed into the casing, as shown in Fig. 2. When the latch is to be applied to a right-hand door, the latch C, the frame F, and the latch-bar I are reversed by turning the same upside down, as shown in Fig. 3. Thus the side C′ always strikes the keeper and pushes the latch back when the door is being closed, and the side C^2 is adapted to engage the keeper and hold the door shut. It will be seen that by the special construction of this latch C the key-holes of the lock and the spindle-openings, &c., in the door are always in the same relative position, and the lock is not turned upside down in changing it from a right-hand door to a left-hand door, as is so frequently the case in locks as now constructed. When the latch C is in its outermost position, as shown in Fig. 1, the end of the fork I′ abuts against the inside of the side A′, thus preventing a further outward movement of the latch.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a reversible latch provided with trunnions mounted to turn, of a bar pivotally connected with the said latch and actuated from the knob-spindle, and a reversible frame held in the casing and in which the said trunnions are journaled, substantially as shown and described.

2. The combination, with a casing provided with studs, of a reversible frame engaged by the said studs, a reversible latch having trunnions fulcrumed in the said reversible frame, and a bar pivotally connected with the said latch and actuated from the knob-spindle, substantially as shown and described.

AMBROSE H. APPLEGATE.

Witnesses:
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