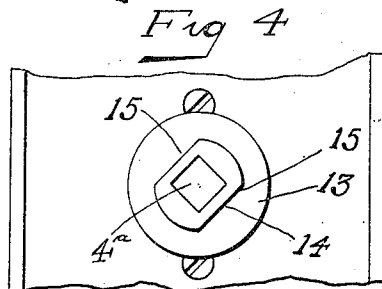
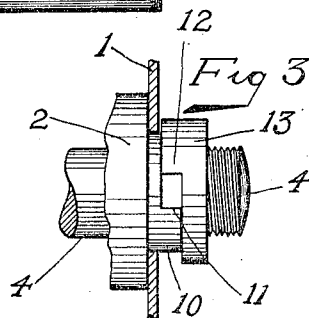
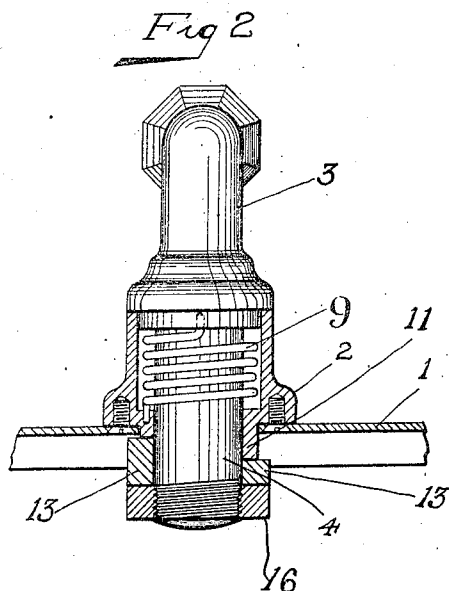
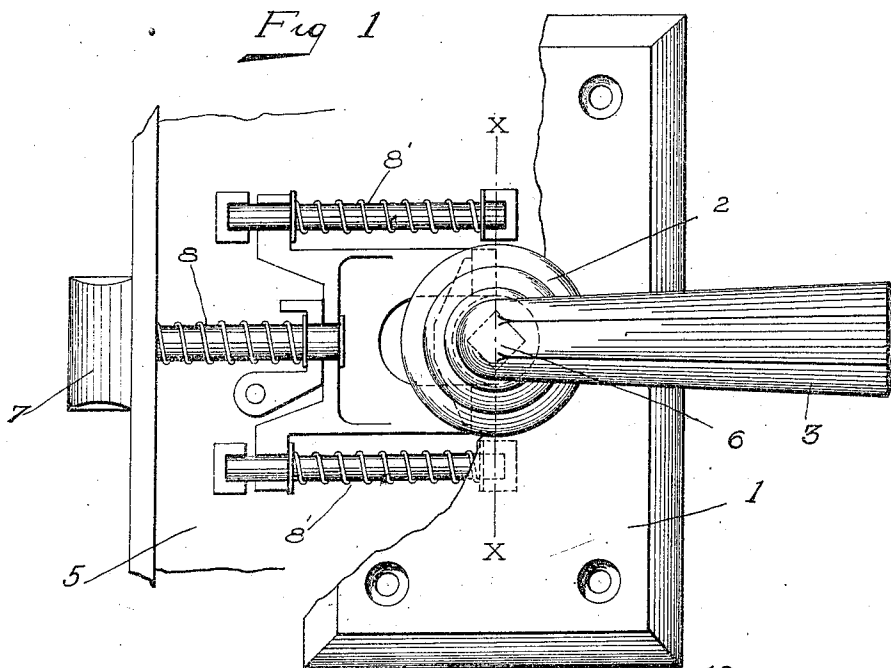


A. A. PAGE.
 LEVER HANDLE FOR DOOR LATCHES.
 APPLICATION FILED JULY 10, 1911.

1,050,996.

Patented Jan. 21, 1913.



WITNESSES:

F. A. Carlson
M. O. Williams

INVENTOR.

Albert A. Page
 BY *Beach and Fisher*
 ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALBERT A. PAGE, OF EAST HAVEN, CONNECTICUT, ASSIGNOR TO SARGENT & COMPANY,
OF NEW HAVEN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

LEVER-HANDLE FOR DOOR-LATCHES.

1,050,996.

Specification of Letters Patent.

Patented Jan. 21, 1913.

Application filed July 10, 1911. Serial No. 637,639.

To all whom it may concern:

Be it known that I, ALBERT A. PAGE, of the town of East Haven, county of New Haven, and State of Connecticut, have invented new and useful Improvements in Lever-Handles for Door-Latches, of which the following is a full, clear, and exact description when taken in connection with the accompanying drawings, which form a part thereof.

My invention relates to lever handles for door latches, and its object is to provide means to compensate for the weight of the handle and insure effectively the retraction of the handle when used in conjunction with the ordinary retracting spring of the latch bolt.

With this end and others in view, my invention is embodied in preferable form in the device hereinafter described and illustrated in the drawings.

In these drawings, Figure 1 is a front view in elevation of an escutcheon in which the lever handle is mounted, and of a casing showing part of the latter broken away, for the purpose of illustrating the latch bolt and its spring. Fig. 2 is a section through the escutcheon on line *x-x*, Fig. 1. Fig. 3 is an edge view of the stop members for limiting the movement of the lever handle, and Fig. 4 is a view of the inner end of the shank with the locking nut removed.

In all figures, similar letters of reference represent like parts.

Referring to the drawing, 1 is a suitable escutcheon mounted on the face of the door, and carrying an outwardly projecting rose 2. A lever handle 3 has a shank 4, which extends through, and is journaled in the rose, and the inner end of the shank 4 is adapted to retract a latch bolt 7 of the ordinary type by means such as a spindle (not shown), connected with the usual hub or roll-back, and fitting in a squared recess 4^a at the inner extremity of the shank 4. The latch bolt 7 is normally held in protracted position by springs 8, 8' acting on the latch bolt shank and yoke, respectively, and tending to hold the lever handle in the normal horizontal position shown in Fig. 1.

Owing to the weight of the lever handle and the fact that such weight is disposed to one side of the center of rotation of the spindle, it is frequently found that the ordinary latch bolt spring, such as 8, is in-

adequate to hold the lever handle in its normal inoperative position. To overcome this difficulty, and to provide an effective means for maintaining the lever handle in normal position and for returning it there-to after it has been operated to retract the latch bolt, and at the same time to effect such object without the necessity of the employment of additional supporting means, a spiral spring 9 is used, which spring is mounted within the rose 2 of the escutcheon and surrounds the shank 4 of the lever handle. One end of this spiral spring is secured to the shank and the other end to the base of the rose, whereby upon moving the handle downward the spring will tend to restore the handle to its normal horizontal position. The base of the rose, to which the spring is preferably connected, conforms closely to the shank and is secured in an appropriate opening in the escutcheon, as shown in Fig. 2.

On the inner face of the escutcheon surrounding the opening through which the handle shank passes is fixed a collar 10 cut away to provide a shoulder 11 against which is adapted to abut the shoulder 12 of a circular stop member 13 carried by the shank. The stop member 13 has inner angular walls 14 adapted to engage squared or angle faces 15 formed on the shank, whereby the stop member is held from rotation on the latter. A lock nut 16 is screwed on the shank beyond the stop member 13. In the normal position of the lever handle, the shoulders of the respective stop members are separated and upon moving the lever handle downward so as to retract the latch bolt the handle will be permitted to move until the shoulder of the stop member 13 strikes against the shoulder of the fixed collar 10.

It will be seen that the arrangement above described provides a means auxiliary to the latch bolt spring for insuring the effective return of the lever handle to normal position, and at the same time this object is attained in a compact assemblage of parts, and by the utilization of the ordinary supporting and operating mechanisms employed with devices of this character.

It will be understood, of course, that so far as the broader aspects of the invention are concerned, a knob may be regarded as the equivalent of a lever handle. It will also be evident that in certain aspects of the inven-

tion, I do not desire to limit myself to the specific form and mounting of the spring, while in other aspects of the invention I do not limit myself to the specific arrangement of the stop means.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:—

1. In a handle device for door latches, the combination with a latch bolt; of a protracting spring for said latch bolt; a lever handle; an escutcheon mounted on the door and having an apertured rose into which the shank of said lever handle projects; and a spiral spring confined within said rose and having one end secured to the shank and the other end to the rose, said spring acting to return the lever handle to normal inoperative position; substantially as described.

2. In a handle device for door latches, the combination of an escutcheon, a latch-manipulating device having a shank extending through said escutcheon, a spring acting on said device to normally hold it in a predetermined position, a fixed shouldered stop collar embracing said shank at the inner face of the escutcheon, and a stop member secured to and embracing the inner end portion of said shank, and having a shoulder cooperating with the shoulder of said collar; substantially as described.

3. In a handle device for door latches, the combination with an escutcheon, of a rose applied to said escutcheon, a latch manipulating member having a shank journaled in said rose and extending through the escutcheon, the inner end of said shank being recessed to receive a latch actuating device, a spring acting on said shank within the rose to normally maintain said latch manipulating member in a predetermined position, said spring being fixed at the ends of the shank and rose, respectively, and stop means associated with the escutcheon and with the inner end of the shank; substantially as described.

4. In a handle device for door latches, the combination with an escutcheon, of a rose applied to the same, a latch manipulating device having a shank journaled in said rose and extending through the escutcheon, the inner end of said shank being recessed to receive a separate latch actuating device, a spring housed within said rose and acting on said shank to hold said latch manipulating device in a predetermined position, a collar surrounding the inner end of the shank and fixed with respect to the escutcheon, and a stop member secured to the inner end of the shank, said collar and stop member having cooperating shoulders to limit the angular movement of the shank; substantially as described.

5. In a handle device for door latches, the combination of an escutcheon, a latch ma-

nipulating member having a shank journaled in said escutcheon and projecting therethrough, a spring acting on said shank to hold said latch manipulating member in a predetermined position, a collar surrounding said shank at the inner face of the escutcheon and fixed with respect to the escutcheon, a stop member embracing and fixed to the shank, said collar and stop member having cooperating stop shoulders, and a lock nut screwed on the inner end of the shank to hold said stop member in position; substantially as described.

6. In a handle device for door latches, the combination with an escutcheon, of a latch manipulating member having a shank journaled in said escutcheon and extending therethrough, the inner end of said shank being provided with a recess to receive a separate latch actuating device, and being further provided with exterior screw threads, a collar surrounding said shank at the inner face of the escutcheon and fixed with respect to said escutcheon, a stop member embracing the inner end of the shank and coacting with said collar, and a lock nut engaging the threads at the inner shank end and holding said stop member in position; substantially as described.

7. In a handle device for door latches, the combination with an escutcheon, of a latch manipulating member having a shank journaled in and projecting through said escutcheon, said shank being recessed at its inner end to receive a latch actuating device, and being further provided with a squared portion adjacent such inner end, a collar embracing the shank at the inner face of the escutcheon, a stop member conforming to the squared portion of the shank end and cooperating with said collar to limit the angular movement of the shank, and a lock nut applied to the end of the shank to hold said stop member fixed in position; substantially as described.

8. In a handle device for door latches, the combination with an escutcheon, of a rose extending outward from the outer face thereof, a latch manipulating member having a shank journaled in said rose and extending through the escutcheon, the inner end of said shank being provided with a squared exterior portion, a spring confined within the rose and acting on the shank to hold the same normally in a predetermined angular position, a collar surrounding the shank at the inside of the escutcheon and fixed with respect to the escutcheon, and a stop member fitting the aforesaid squared exterior portion of the shank, said collar and stop member having cooperating shoulders to restrict the angular movement of the shank; substantially as described.

9. In a handle device for door latches, the combination of an escutcheon having an

opening therein, a rose having a base secured
in said opening, the wall of the rose being
extended outward from the front face of the
escutcheon, and the base of the rose being
5 provided with a spindle receiving opening,
a latch manipulating member having a
shank journaled in said rose and passing
through the opening in the base thereof, and
a spiral spring acting on said shank within

the rose and having one end attached to the 10
base of the rose; substantially as described.

In witness whereof I have hereunto set my
hand on the 6th day of July, 1911.

ALBERT A. PAGE.

Witnesses:

HOWARD J. FLETCHER,
ELIZABETH M. HORAN.