J. BROWN.
LATCH.

No. 410,728.

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Fig. 1.

Fig. 2.

Witnesses:

N. B. Harris

Stewart Bacon

Inventor

Joseph Brown

By C. H. Gilmer

Attorney
JOSEPH BROWN, OF SANTA ROSA, CALIFORNIA.

UNITED STATES PATENT OFFICE.

LATCH.


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To all whom it may concern:

Be it known that I, Joseph Brown, a citizen of the United States, residing at Santa Rosa, in the county of Sonoma and State of California, have invented certain new and useful Improvements in Latches; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in door-locks and drift-bolts; and it consists in the construction and arrangement of parts hereinafter described and claimed.

The object of my invention is to provide means whereby the door of a building may be bolted or caught at both ends and its outer edge when the door is closed and when necessity requires to so fasten the several catches to prevent their being withdrawn, thereby securely locking the door. I attain this object by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate corresponding parts in the several views, and in which—

Figure 1 is a side elevation of a portion of a door partly in section, and Fig. 2 is a vertical section through the line $x$ of Fig. 1.

In the drawings, $A$ represents the door having a vertical recess extending through its entire length near its outer edge, and a circular chamber, as $a$, near its center.

$B$ represents the knobs, the connecting-rod $C$, which unites the same, being extended through the chamber $a$. This rod $C$ has two wings $c$ formed integral therewith on opposite sides. The wings extend out from the rod for some distance, the lower one $c$ having a single aperture in its outer edge, and the upper one $c'$ having two apertures therein, as shown in Fig. 2. The rod $C$, adjacent to the wings, is made rectangular in shape, while its outer ends are cylindrical. The upper and lower ends of the vertical recess are somewhat enlarged, and have frames, as $d$, placed therein, in which the bolts or catches $D$ are placed. The catches $D$ have shanks $d'$ extending inward, which project through openings in the frames into the recess. Around these shanks in the frames are placed spiral springs $d''$, which force the catches out. Secured to the lower ends of shanks $d'$ are chains $E$, extending through the recess and having their inner ends secured in the apertures in the respective wings.

$F$ represents a catch located in the outer side edge of the door, it being constructed in a manner and arranged in a frame similar to catches $D$, the shank $f$ extending into the chamber $a$.

$f'$ represents the forcing-out spring.

By this construction it will be readily seen that as the knobs are turned the catches $D$ are drawn back, and to enable a like movement being imparted to the side catch $F$, I attach a chain $f''$ to the end of the shank and secure the opposite end in the other hole in the upper wing, so that by turning the wing $c'$ back it draws the catches $F$ and $D$ in, while the wing $c$ draws the lower catch $f'$ back, thus allowing the door to be opened.

To securely bolt the door and prevent the catches from being drawn back, I have placed a slide $H$ in a recess formed in the door, its lower end having a rectangular bifurcated slot therein, which is adapted to fit over the square portion of the rod $C$ when the slide is down. To manipulate the slide, a knob $h$ is secured to its upper end on the inside of the door, which works in an elongated slot formed in the outer plate $h'$. This disposition of the catches affords a secure fastening to the door.

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

In combination with a door having a vertical recess therein and a chamber, as at $a$, a square rod extending through said chamber and having knobs or handles on the extremities thereof, and wings projecting from the opposite sides of the center, said wings being integral therewith, one having two and the other a single aperture therethrough, the bolt-frames $d$ at the extremities of the vertical recess and having bolts therein actuated by springs, said bolts having connection with the wings on the square
rod by a chain or other suitable means, the catch F, extending through the front edge of the door and surrounded by a coil-spring and manipulated by a wing on the rod C, and the vertical adjustable locking-plate H, having a bifurcated end, which plate fits over the square rod C, thus preventing said rod from turning, substantially as and for the purposes set forth.

JOSEPH BROWN.

Witnesses:

A. G. BURNETT,
FRANK B. HOOD.