

B. S. DODGE.
COIN OPERATED LOCK.

Patented Feb. 23, 1892.

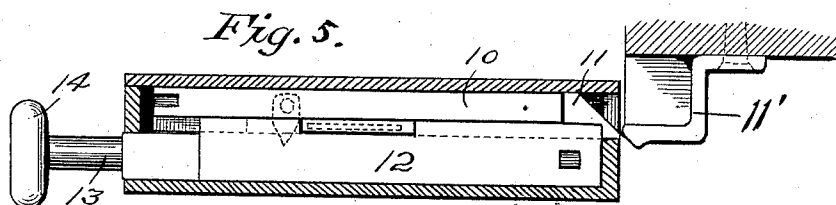
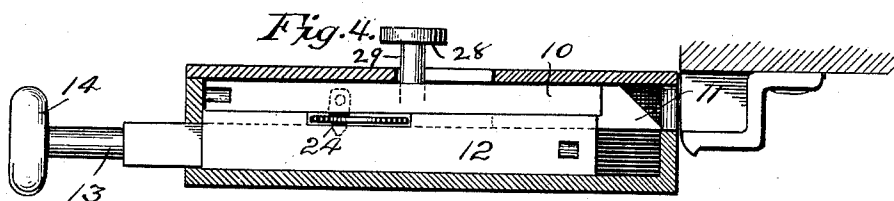
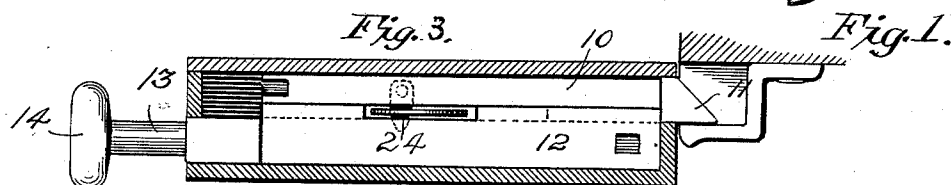
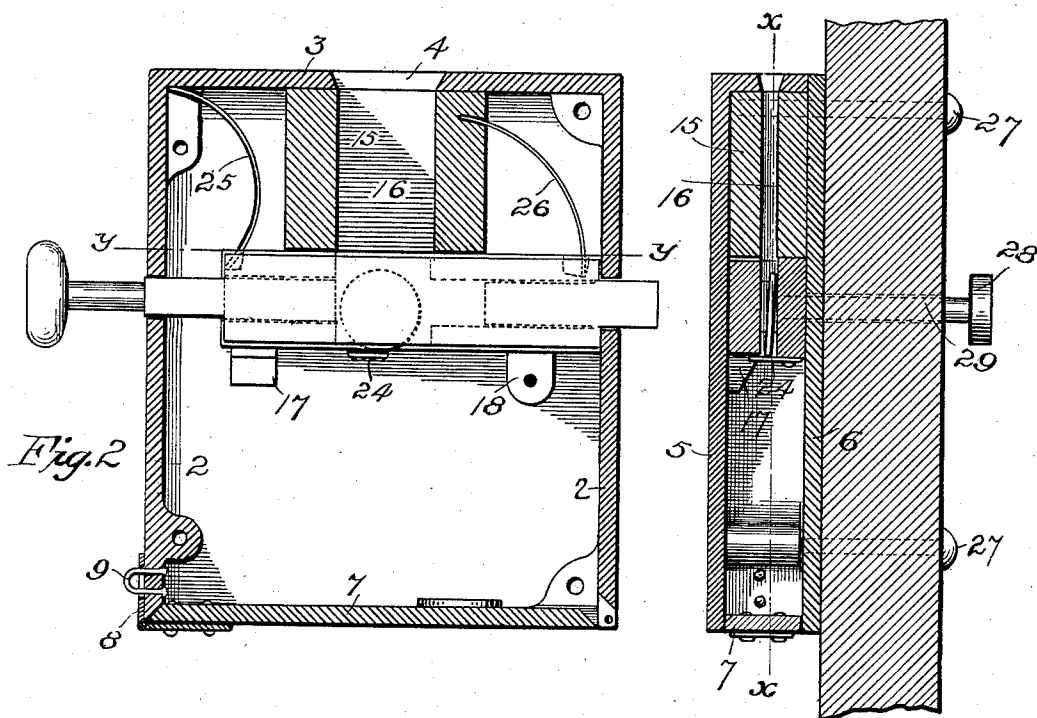


Fig. 6.

Witnesses,
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UNITED STATES PATENT OFFICE.

BENJAMIN S. DODGE, OF MINNEAPOLIS, MINNESOTA.

COIN-OPERATED LOCK.

SPECIFICATION forming part of Letters Patent No. 469,294, dated February 23, 1892.

Application filed November 9, 1891. Serial No. 411,277. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN S. DODGE, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain

5 Improvements in Coin-Operated Locks, of which the following is a specification.

My invention relates to a lock for use on doors of apartments or closets for entrance to which an admission fee is charged; and

10 its object is to provide a mechanical device of extremely simple construction adapted for such use.

To this end my invention consists in a lock, or, more properly, a spring-latch, comprising,

15 in combination with the containing box or case, a latch-bar arranged therein and means for normally holding the same outward, and a pull-bar whereto the knob on the outside of the lock is attached, said parts being connected by longitudinal tenons, slots provided

20 therein to receive the coin, and means whereby on snapping back the latch as the door is closed the coin is discharged from between said bars or plates, and in details of construction and combinations, all as hereinafter described, and particularly pointed out in the

25 claims.
My invention will be more readily understood by reference to the accompanying drawings, in which—

30 Figure 1 is a sectional view showing a lock embodying my invention, secured upon a section of the door. Fig. 2 is a vertical longitudinal section of my lock on the line $x x$ of Fig. 1, the longitudinally-movable bars or

35 plates thereof being shown in full lines. Figs. 3, 4, and 5 are horizontal sections on the line $y y$ of Fig. 1, showing the different positions of the bars; and Fig. 6 shows said bars removed from the lock and opened away from

40 each other, so as to show more clearly the longitudinal lugs or tenons thereon.

As shown in the drawings, the lock or latch is inclosed in the metal box or case having

45 the side walls 2, the top 3 provided with the coin slot or opening 4, the face and back plates 5 and 6 and the hinged bottom 7 having the hasp 8, adapted to be secured on the staple 9 by a small lock—as, for instance, a

50 padlock. The case is made the width of a coin, so that the coin may fall flat on the bottom and not clog the space beneath the slid-

ing bars. These bars are two in number—namely, the latch bar or plate 10, having the latch or bolt 11, arranged to engage the latch

55 plate or opening 11' in the door-frame, and the bar 12, provided with the shank 13 and knob 14, by means of which the bar may be drawn back. The block 15 is arranged above

the sliding bars, and is provided with the ver-

60 tical slot 16, down through which the coin falls into the slot provided between the bars 10 and 12, which bars are supported and held

between the lower end of the block 15 and the lugs or brackets 17 and 18, provided be-

65 neath the bars. The bars are held against lateral play by the walls 5 and 6 of the lock. On the bar 10 I provide the lugs 19 and 20,

and leaving a space of nearly twice the width of a coin between the same. On the other

70 bar I provide the projections 21 and 22, which embrace those of the other bar, a space being left between these of just a little over the width of a coin. The lugs 19 and 21 are

75 about the same length, and when the lock is in its normal position these parts and the rear ends of the bars 10 and 12 stand in line. Thus a slot the width of a coin is left be-

tween the bars. This slot and that in the top of the lock-case are usually of a size to ac-

80 commodate either a penny, a nickel, or a dime. On the lower edge of the bar 10 I provide the small projecting lug 24, preferably cast in the

same piece therewith and extending across this slot, so that when the coin is first dropped

85 therein it is held between the bars. Now, when the handle is drawn out from the Fig. 4 and Fig. 1 position into the position shown

in Fig. 5, the coin is caught between the end of the tenon 19 on the bar 10 and the ends of

90 those numbered 22 on the other bar 12, thus locking the bars together, so that the bar 10 is pulled back with the bar 12, thus with-

95 drawing the latch-bolt 11 and permitting the door to be opened. When the knob 14 is free, the bars 10 and 12 are simultaneously

thrown back by the springs 25 and 26, fastened in the frame of the lock and engaging the bars 10 and 12, respectively, the recesses

being provided therein for the lower ends of

100 the springs. These springs being placed above the bars, the entire space beneath them is left free as a receptacle for the coins. When the door is swung back into place, the

bolt 11, striking on the plate 12, is momentarily thrown back, and this bar, moving back independent of the bar 12, carries the lug 24 from beneath the coin in the slot, which thereupon drops into the receptacle beneath, after which the latch-bar is immediately thrown out again by the spring 25, and the lug 24 is then in position to hold the next coin. It is to allow this independent movement of the bar 10 that the lug 20 is cut back beyond the ends of the lugs 21 and 22, and it will be seen that, if desired, the lug 20 may be dispensed with, though its use is preferable, as it acts as a guide for the forward end of the bar 12. No coin being in the slot, the bar 12 may be pulled back without operating the latch-bar 10.

My lock is secured directly on the outside of the door by screws 27 passing through the same. The lock or latch may be operated from within the door by the knob 28, having the shank 29, extending through a longitudinal slot in the door and the back wall 6 of the lock and fastened in the bar 10.

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

1. The combination, in a coin-operated lock, of the case thereof, with the independently-slidable bars having a slot arranged between them and tenoning-lugs forming the ends of the said slot between the same, a latch-bolt arranged in connection with one of said bars and a knob in connection with the other, and a lug provided on the lower edge of the latch-bar to hold a coin in said slot to lock said bars together, substantially as described.

2. The combination, in a coin-operated lock, with the case thereof and guides, of bars 10 and 12 to move in said guides, said bar 10

provided with a bolt 11 and the bar 12 with an operating-knob, said bars provided with a vertical slot arranged between the tenoning-lugs on said bars, the slot in the bar 12 being of a size to admit a coin and that of the bar 10 making the other side of the slot being wider than the coin, a lug or projection 24 on the bar 10 to hold the coin while the bars 10 and 12 are in their normal position, means for opening the containing-space to remove coin from the lower part thereof, and springs 25 and 26 for normally holding said bars 10 and 12 forward, respectively, substantially as described.

3. The combination, in a coin-operated lock, of the lock-case provided with the hinged bottom 7 to be secured by an independent lock, the top of the case provided with the slot 4, the block 15, having the slot 16 registering therewith, bars 10 and 12, arranged beneath said block, the brackets or lugs 17 and 18 for supporting the same, the springs 25 and 26 for said bars, respectively, the latch-bolt 11 on the bar 10, the knob 14 on the other bar, the vertical slot between the said bars normally registering with the slots 4 and 16, the overlapping lugs 19, 21, and 22 of said bars, the projection 24 on the bar 10 normally closing the bottom of the slot between said bars, and a knob or handle 28, by means of which said bar 10 may be operated independently of said bar 12, substantially as described.

In testimony whereof I have hereunto set my hand this 14th day of October, 1891.

BENJAMIN S. DODGE.

In presence of—

C. G. HAWLEY,
BESSIE BOOTH.