No. 744,858. PATENTED NOV. 24, 1903.

J. A. DURNBAUGH.

LOCK FOR POST OFFICE LOCK BOXES.

APPLICATION FILED MAY 28, 1902.

NO MODEL.

Fig. 1.

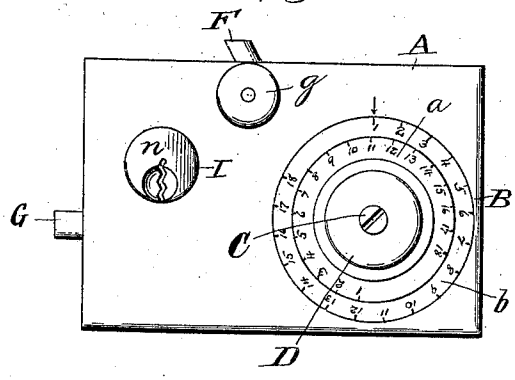

Fig. 2.

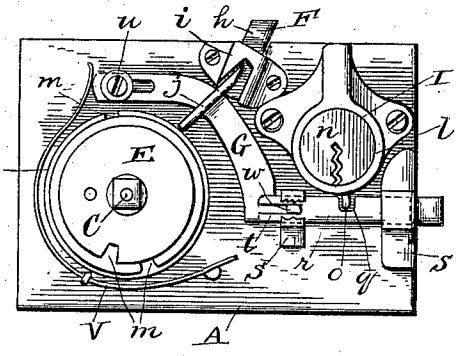

Fig. 4.

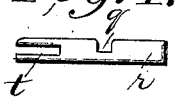

Fig. 3.

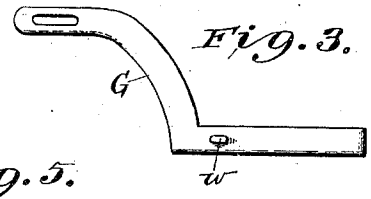

Fig. 5.

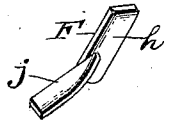

Fig. 6.

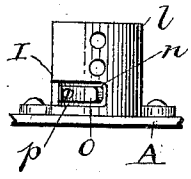

Fig. 7.

Witnesses

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 744,858. Patented November 24, 1903.

UNITED STATES PATENT OFFICE.

JOSEPH A. DURNBAUGH, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO JOHN McLANE, OF MILFORD, NEW HAMPSHIRE.

LOCK FOR POST-OFFICE LOCK-BOXES.

SPECIFICATION forming part of Letters Patent No. 744,858, dated November 24, 1903.

Application filed May 28, 1902. Serial No. 109,400. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. DURNBAUGH, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Locks for Post-Office Lock-Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in locks for post-office lock-boxes and other receptacles; and its object is to adapt to the ordinary well-known form of door or opening for such receptacles a twofold or double locking mechanism consisting of a permutation or combination lock and a well-known form of cylinder-pin and tumbler lock combined with a spring-controlled locking-bolt common to both mechanisms and by means of which spring the bolt may be operated by either mechanism alone or alternately by both.

The form of my invention is shown in the drawings, in which—

Figure 1 is a front outside view of the lock in upright position; Fig. 2, a back view of the same, showing the spring-controlled latch and other connections of the two forms of locks; Fig. 3, a detail of the operating latch or bolt; Fig. 4, a detail of the sliding plate for said latch and for a tongue of the pin-lock; Fig. 5, a detail of the lever for engaging the combination-lock; Fig. 6, a detail of the pin-lock, showing the dog connected therewith for operating the keeper of the locking-latch; and Fig. 7 a detail of small keeper for holding a portion of the combination-lever which slides therein.

Referring to the drawings, A is a plate to be attached to the front part of the door of a lock-box, and to which plate are secured the various parts of the locking mechanism.

B represents a combination-lock consisting in one part, as shown in Fig. 1, of two disks—an inner, one, *a* and an outer one, *b*—both provided with numerals on their edges, as shown, or which may be letters, or both, as in ordinary locks of that character, and both of which disks are mounted on a central shaft C, which is operated by a thumb-nut D. At the rear of the plate, as shown in Fig. 2, this lock is composed of a series of disk and notched tumblers E, also mounted on shaft C. The setting and operation of such a lock for any particular combination of signs are so well known as to need no further description.

F is a sliding push-bar or lever designed to be operated by thumb-piece *g* and is composed, as shown in Fig. 2, of a slide-piece *h*, that is confined within a slotted keeper *i*. The lower end of such slide-piece is rounded and adapted to engage with a spring-controlled latch or bolt G. To near the lower end of the slide-piece *h* is cast a finger *j*, adapted to engage with a notch or notches in the tumblers E.

I is a barrel-pin lock of a well-known variety, the front of which is shown in Fig. 1, a rear part in Fig. 2, and a detail in Fig. 6. In the casing *l* of such lock is placed a rotary barrel *n*, which is provided with a dog *o* and which projects out of a slot *p*, cut out in the casing *l*. The dog *o* is adapted to engage with a slot *q* of a sliding plate *r*. This plate rests against and slides upon the straight outer arm constituting the bolt portion of the lock-bar G, and both the slide and that portion of the bolt are confined in place and to the lock by straps S. The bolt-bar then curves upward and inward and terminates at that end in a straight arm. This upper straight end is screwed to the plate A by a screw *u*, which extends through a slot in that end of the bolt to permit the bolt to slide thereon. Against that end of the bar G bears the end *m* of an actuating-spring V. The slide *r* is also provided at its inner end with an open slot *t*, with which a pin *w* on the said arm of the lock-bar engages.

The operation of the device is as follows: Beginning with the combination-lock, such lock when turned to the desired combination by the nut D will bring one or more slots of the tumblers in line with the engaging dog *j*. Then on giving the thumb-nut *g* a turn to effect a downward pressure on slide *h* the lower end of dog *j* enters the slot or slots of the tumblers to lock and hold the latter in position, while the rounded lower end of the slide *h*, of which the said dog is an extension, is at the same time forced against the middle curved portion of bolt G, serving to retract the bolt against the action of the end *m* of

spring V and to unlock the door. On releasing the hold on thumb-nut *g* the end *m* of spring V throws the bolt G outward and automatically locks the door. The operation of the key-lock portion I independently of the combination-lock is very simple. The turning of a key therein rotates the barrel *n*, throwing the dog *o* against one side of the slot *q* of slide *r*, which in turn engaging with the lug *w* of the bolt G forces the bolt backward to unlock the door. On the release of the key the action of the end *m* of the spring V against the upper inner end of bolt G again throws the bolt back to its normal position and locks the door. It will be noticed that in both operations the barrel *n* and the slide *r* will move in both directions with the bolt G.

What I claim is—

1. In a lock for a post-office lock-box, or other receptacle, the combination of a key-lock and a keyless lock, and locking means common to both and operated by either of said locks, said locking means composed of a spring-controlled sliding bolt, a sliding bar on and engaging with said bolt, and a key-barrel to actuate said slide, substantially as described.

2. In a lock of the character described, a keyless portion, comprising a combination-lock having tumblers and a turn-button and slide-stop to engage said tumblers, and a locking-bolt adapted to engage with a portion of said stop, whereby the bolt is retracted by the turn-knob, in combination with a spring, against which one end of the bolt is pushed when so withdrawn and by which the bolt is thrown forward when the turn-button is released, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH A. DURNBAUGH.

Witnesses:

JAS. H. BLACKWOOD,

H. P. DOOLITTLE.