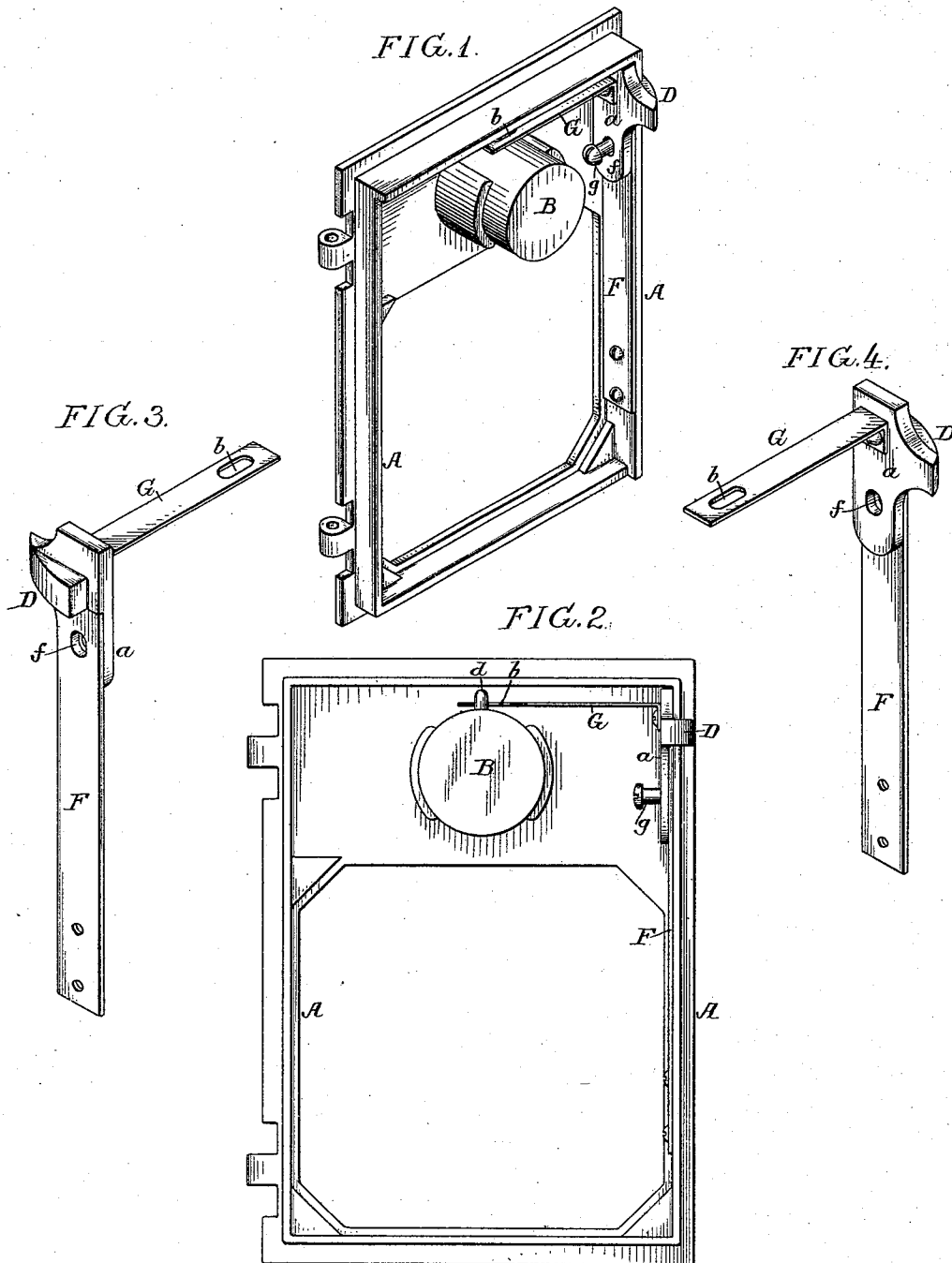


(No Model.)

M. JACKSON.
LATCH.

No. 491,053.

Patented Jan. 31, 1893.



Witnesses:
Hamilton D. Turner
Alex. Barkoff

Inventor:
Milton Jackson
by his Attorneys
Howson & Howson

UNITED STATES PATENT OFFICE.

MILTON JACKSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE
MILLER LOCK COMPANY, OF SAME PLACE.

LATCH.

SPECIFICATION forming part of Letters Patent No. 491,053, dated January 31, 1893.

Application filed September 14, 1892. Serial No. 445,884. (No model.)

To all whom it may concern:

Be it known that I, MILTON JACKSON, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Latch-Locks, of which the following is a specification.

The object of my invention is to provide a post office lock box or other door with spring latch mechanism of such character that while the latch can be withdrawn by the lock in the ordinary manner in opening the door, said latch will, on closing the door, yield more readily than the latches as usually constructed or combined with the lock, so that the door can be closed and locked without slamming, which, in the case of a post office lock box door, tends to break the glass and otherwise injure the door and its fastenings. This object I attain by hanging the latch upon a spring arm independent of the lock and connecting the latch to the lock by means of a slotted bar or equivalent connection whereby the movement of the lock cylinder can be imparted to the latch in order to open the same, but which will permit movement of said latch independently of the lock in closing the door.

In the accompanying drawings:—Figure 1, is a perspective view of a post office lock box door illustrating my invention; Fig. 2, is a view of the inside of the door; and Figs. 3 and 4, are views of the latch and its adjunctive devices removed from the door.

The door A may be constructed in any of the usual ways and provided with any of the usual forms of lock, such for instance as that represented at B in Fig. 1. The tapered or beveled latch D, which serves, by engagement with the door frame, to retain the door in the locked position, is mounted upon the upper end of a spring arm F, which is secured at its opposite end to the door frame in any available manner; the vertical portion *a* of the latch also carrying a bar G which extends inward to the lock casing and has a longitudinal slot *b* for the reception of a pin *d* which projects from the movable portion of the lock.

In the portion *a* of the latch is an opening *f* for the reception of a stud or pin *g* projecting inward from the door frame, this pin having at the inner end a head or enlargement which serves to prevent undue inward move-

ment and straining of the spring when the latch is retracted by the lock. The pin also serves to support the latch laterally and resists any undue yielding of the latch when an attempt is made to force the door open. When the lock is turned in the proper direction the pin *d* will engage with the bar G and withdraw the latch D from engagement with the frame so as to unlock the door, but when the door is closed and the latch is forced inward by contact with the edge of the door frame, this movement is not transmitted to the lock mechanism owing to the presence of the slot *b* in the bar G. For this reason, and owing to the long spring arm F to which the bolt is hung, the yielding of the latter is effected more readily than when it is connected directly to the locking mechanism as usual so that the locking of the door can be effected without the necessity of closing the same so forcibly as to cause injury to the glass panel in the lower portion of the door.

It will be evident that various forms of slack or lost motion connections may be used between the lock and latch without departing from the main feature of my invention; for instance, a link having a loop for engaging with the pin *d* or a chain connected at one end to the pin and at the other end to the latch. Having thus described my invention I claim and desire to secure by Letters Patent:—

1. The door having lock mechanism, a latch carried by a spring arm independent of said lock mechanism, and a slack or lost motion connection between the latch and a movable projecting portion of the lock, whereby the retraction of the latch by the lock mechanism is provided for, and the latch permitted to yield without imparting movement to said lock mechanism, substantially as specified.

2. The door having lock mechanism, a latch carried by a spring arm independent of said lock mechanism, and a slotted bar providing a lost motion connection between the latch and a projecting operating portion of the lock, substantially as specified.

3. The combination of the lock, the spring arm carrying the latch, a connection between said latch and lock, and a pin adapted to an opening in the latch and serving to prevent

lateral movement of the same, substantially as specified.

4. The combination of the lock, the spring arm carrying the latch, a connection between
5 said latch and lock, and a headed pin adapted to an opening in the latch, and serving to restrict the yielding movement of the spring arm, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MILTON JACKSON.

Witnesses:

JOSEPH H. KLEIN,
HARRY SMITH.