

TIME ATTACHMENTS FOR LOCKS.

Patented May 2, 1876

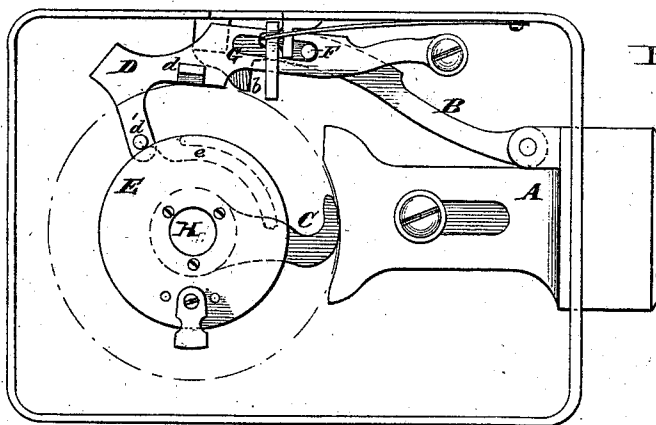


Fig. 1

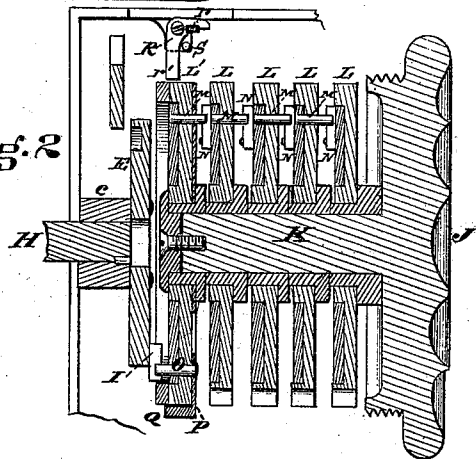
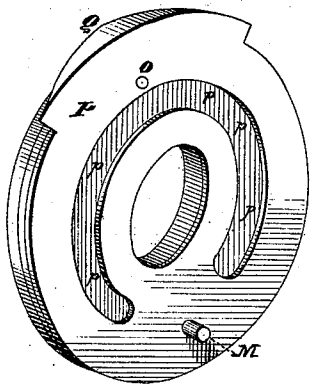


Fig. 2

Fig. 3



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UNITED STATES PATENT OFFICE.

MILTON A. DALTON, OF CINCINNATI, OHIO, ASSIGNOR TO THE HALLS SAFE AND LOCK COMPANY, OF SAME PLACE.

IMPROVEMENT IN TIME ATTACHMENTS FOR LOCKS.

Specification forming part of Letters Patent No. **176,933**, dated May 2, 1876; application filed March 16, 1876.

To all whom it may concern:

Be it known that I, MILTON A. DALTON, of Cincinnati, Hamilton county, State of Ohio, have invented an Improvement in Time-Lock Attachments, of which the following is a specification:

My invention consists in such an arrangement of parts as that the time attachment will at all times, when the lock is not permitted to be opened, throw the driving-pin of one of the tumblers out of connection with the drive-wheel or bolt-throwing plate of the lock, and at the proper time will not disturb the connection, and thus permit the lock to be opened in the ordinary way.

Figure 1 is an elevation of a lock, exclusive of tumblers, embodying my improvement. Fig. 2 is a section through the tumblers. Fig. 3 is a perspective view of the tumbler which connects with the drive-wheel.

A is the bolt of the lock, and B the gravitating-dog, which, when down, permits the revolving-hook C to engage with its hook *b* and throw the bolt. D is the angle-bar which dogs the tumblers, its projecting arm *d* occupying a position over the tumblers, so that when the tumblers are set to the combination it can fall into the notches thereof, the pin *d'*, at the same time, falling into the groove *e* of the drive-wheel E, the latter being secured to the hub *e* of the hook C in the ordinary way. The dog B and angle-bar D are connected together by the usual pin-and-slot device F G. H is the spindle of the lock, carrying the hook C and drive-wheel E, the latter having the fly I to revolve the tumblers. J is the rosette which is at the back of the lock, and carries the tumbler-journal K. L L' are the tumblers, having the usual projecting pins and flies M N, respectively, to connect them with each other for driving purposes. The tumbler L' carries a pin, O, which is rigidly secured to

the spring-plate P, the plate being cut away on its face, as shown at *p*, to give it the requisite flexibility. It is secured in place, as shown in Fig. 2, and its pin O and the pin M of the tumbler prevent its displacement. It is provided with a laterally-projecting lip, Q, extending over the tumbler L'. R is a bell-crank lever, the arm *r* of which is placed in connection with a time attachment, so that at the proper time for the opening of the lock the arm *r'* may be permitted to move to the left, as shown in Fig. 2. At all other times the bell-crank is held against the pin S by a hook under the arm *r*, or any other suitable connection with the clock.

When the bell-crank R is permitted to swing loosely, or is held in place by a delicate spring, the entire lock operates in the ordinary way, and can be opened at any time; but when the bell-crank is held rigidly by the clock, in the position shown in Fig. 2, it is impossible for the drive-wheel E to adjust the tumblers, owing to the fact that the driving-pin O is attached to the spring-plate P, which carries the cam-like projection Q, for in operation, when the bell-crank is so held, the projection Q impinges against the arm *r'*, so as to force the spring-plate backward, and thus throw its pin O entirely out of connection with the driving-fly I on plate E.

I claim—

A lock in which one of its tumbler-driving pins is thrown in or out of connection with its corresponding fly by the operation and connection of a time attachment.

In testimony of which invention I hereunto set my hand.

MILTON A. DALTON.

Witnesses:

EDGAR J. GROSS,
C. B. PARCELLS.