

(No Model.)

J. H. DATES.
INDICATOR LOCK.

No. 564,185.

Patented July 21, 1896.

Fig: 2.

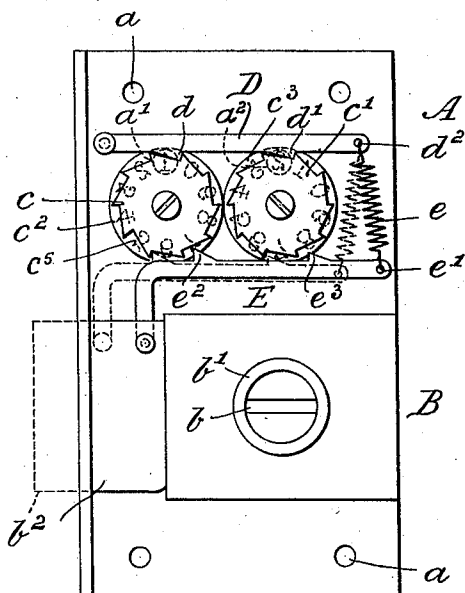
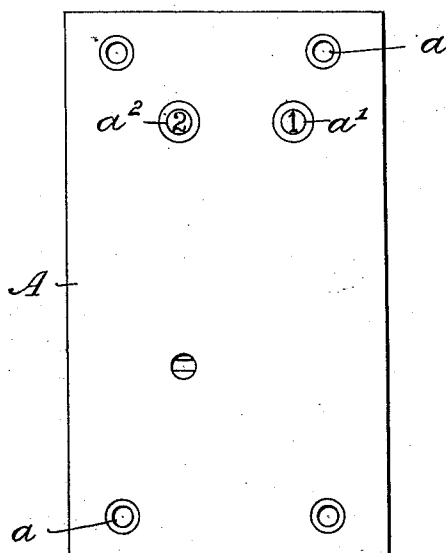


Fig: 1.



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UNITED STATES PATENT OFFICE.

JOHN H. DATES, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO SAMUEL P. PARKE, OF SAME PLACE.

INDICATOR-LOCK.

SPECIFICATION forming part of Letters Patent No. 564,185, dated July 21, 1896.

Application filed May 1, 1896. Serial No. 589,836. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. DATES, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Indicator-Locks, of which the following is a specification.

My invention has relation to a lock for application to sundry articles for locking the same, as well as readily determining tampering or unauthorized access to the article to which applied by the relocking of the same; and in such connection it relates particularly to the construction and arrangement of an indicator-lock for cash-registers, post-office boxes, money-chests, or other similar articles.

The principal object of my invention is to provide a simple, durable, effective, and reliable indicator-lock for application to articles to indicate by means of numerals the locking of the same and to readily determine if any tampering with the interior of the article or unauthorized relocking has been resorted to by change of exposed numerals and the counters or indicators actuated by the key of the lock which secures the members of the article.

My invention, stated in general terms, consists of an indicator-lock constructed and arranged in substantially the manner herein-after described and claimed.

The nature and characteristic features of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is a front elevation of an indicator-lock embodying the features of my invention, and Fig. 2 is a rear elevational view of the same.

Referring to the drawings, A is the frame or face-plate of the lock, provided with corner openings *a* for securing the same to an article, and provided with openings or windows *a'* and *a''*, located adjacent to each other in said plate A, and through which are exposed numerals, as clearly illustrated in Fig. 1 of the drawings.

B is the lock, of any suitable construction,

incased, as shown, and with a keyway *b* extending through the face of the case *b'* of the lock, and having a lock-bolt *b''*, adapted to be manipulated by a skeleton or other form of key.

To the rear of the frame or plate A of the lock is pivotally mounted two ratcheted wheels *c* and *c'*, provided on one of their respective faces with numerals or disks *c''* and *c'''*, having numerals printed or otherwise applied thereto. These disks are secured to the wheels *c* and *c'*, and are adapted to be revolved therewith in a manner to be presently explained.

D is a lever provided with two downwardly-projecting pawls *d* and *d'*, and this lever is pivoted at one end to the frame or plate A, and at its other end is formed an eye *d''* for engaging one end of a coiled spring *e*, the other end of which is connected through an eye *e'* with a lever E, provided with two upwardly-projecting pawls *e''* and *e'''*, the lower angular end of said lever E being secured to the lock-bolt *b''*, as clearly shown in Fig. 2, wherein is also illustrated in full and dotted lines the locked and unlocked positions of the device and the indicator mechanism thereof.

The teeth of the ratchet-wheel *c'*, which carries the dial whereon is placed the numerals indicating tens, are all cut to an equal depth, and the teeth of ratchet-wheel *c* are likewise cut to equal depth with the exception of a tooth *c''*, which is cut deeper into the wheel. This deeper tooth *c''* is diametrically opposite to that portion of disk *c''* whereon the numeral "0" is placed. By the arrangement of the pawls carried by levers D and E and the arrangement of the teeth of the wheels *c* *c'* the lock-bolt *b''* may be shifted nine times without the pawl of lever E operating the disk *c'*. This is so for the following reason: When the bolt *b''* is shifted into locking position, the lever E is drawn to the left, operating through its pawl *e''* and a shallow tooth of the ratchet-wheel *c* the disk *c''* one space. The movement of the bolt *b''* slightly lowers the lever E to a position indicated in dotted lines in Fig. 2, in which position the pawl *e'''* is not in engagement with the teeth of ratchet *c'*, and conse-

quently the disk c^3 thereof cannot be rotated. When, however, the pawl e^2 of lever E comes into engagement with the deep tooth c^3 , the spring e will draw the lever E upward until the pawl e^3 is in engagement with the teeth of wheel c' , and thereupon the next movement of lock-bolt b^2 will advance both wheels and likewise each disk one space.

From the above description it will be apparent that the number of times the lock-bolt b^2 is turned by the key of the lock or otherwise will be indicated continuously by the disks c^2 and c^3 , and that tampering with the lock can therefore be easily detected.

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

1. An indicator-lock, comprising a frame or plate provided with openings and with a lock adapted to be manipulated by a key, two ratcheted wheels two pawl-levers, one of said levers pivoted to said frame or plate and the other secured to the lock, and said levers connected with each other by means of a

spring, substantially as and for the purposes described.

2. An indicator-lock, comprising a frame or plate having openings or windows to expose numerals and carrying an incased lock operated by a key, two ratchet-wheels carrying disks provided with numerals, said wheels pivotally connected with the rear of said frame or plate, two levers provided with oppositely-disposed pawls, whereof one lever is pivoted at its lower end to said frame or plate and whereof the other having an angular lower extension is secured to said lock and said levers at their upper ends connected with each other by means of a spring, substantially as and for the purposes described.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

JOHN H. DATES.

Witnesses:

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THOMAS M. SMITH.