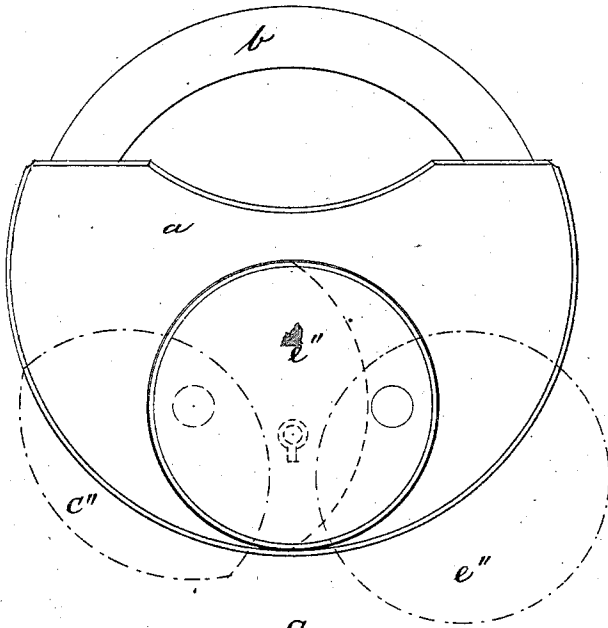


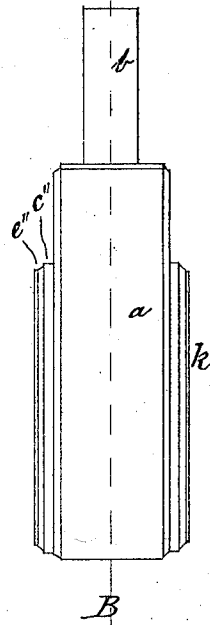
C. A. WALLIN.
Improvement in Pad-Locks.

No. 131,237. Patented Sep. 10, 1872.

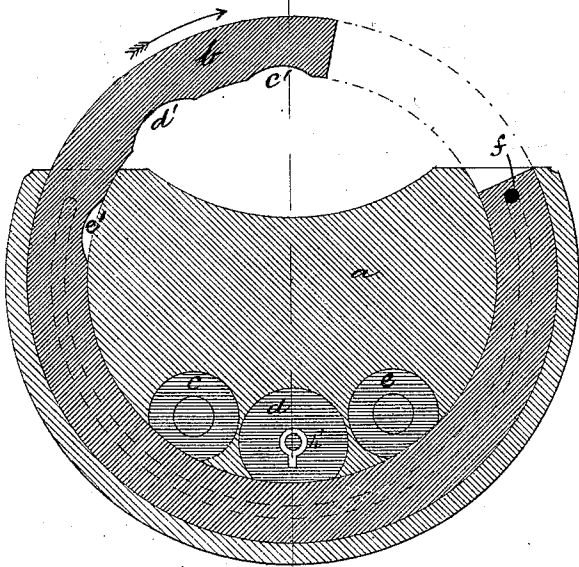
Fig. 1.



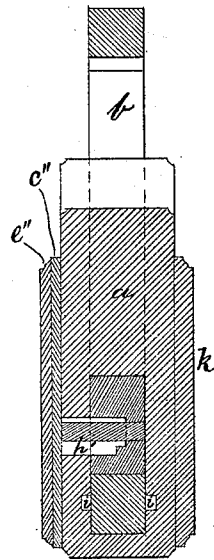
A
Fig. 2.



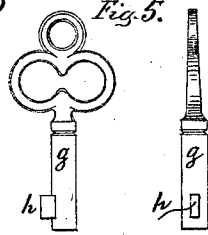
C
Fig. 3.



B
Fig. 4.



D
Fig. 5.



Witnesses:

Myron A. Cole.

Wm. H. Hutchinson

Inventor:

Carl Alfred Wallin
by Abraham Lincoln his attorney.

UNITED STATES PATENT OFFICE.

CARL ALFRED WALLIN, OF STOCKHOLM, SWEDEN.

IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. 131,237, dated September 10, 1872.

I, CARL ALFRED WALLIN, of Stockholm, in the Kingdom of Sweden, have invented certain new and useful Improvements on Locks, of which the following is a specification:

Nature and Objects of the Invention.

The nature of my invention relates to improvements in locks, so arranged that a circular open ring is made to move in a corresponding circular groove in the body of the lock and held in place by means of movable cylinders that engage in corresponding notches made in the ring, as will be hereinafter more fully shown and described.

In the drawing, Figure 1 is a side view of my lock as shown locked. Fig. 2 is an edge view of the same. Fig. 3 is a central section taken on the line A B of Fig. 2, showing the parts in an unlocked position. Fig. 4 is a cross-section on the line C D of Fig. 3; and Fig. 5 shows a side and edge view of the key for the lock.

Similar letters refer to similar parts wherever they occur in the drawing.

a is the body of the lock, in which a circular groove is turned, wherein the open ring *b* is made to move freely. In the body *A* of the lock are a number of cylinders, *c*, *d*, and *e*, movable around their centers. Said cylinders are cut off on one side, as shown in Fig. 3, and the ring *b* can thus be moved in either direction when the cylinders *c*, *d*, and *e* are placed in the positions as shown in Fig. 3. A suitable number of notches, *c'*, *d'*, and *e'*, are made on the inside of the ring *b*, of a size and shape so as to fit properly the circular surfaces of the cylinders *c*, *d*, and *e*.

When the lock is to be locked I move the ring *b* in the direction of the arrow, as shown on Fig. 3, till the notches *c'*, *d'*, and *e'* come directly opposite the cylinders *c*, *d*, and *e*, when I turn the said cylinders *c*, *d*, and *e* around their centers, so that their circular surfaces come to fit exactly in the corresponding notches *c'*, *d'*, and *e'*, on the ring *b*.

It is not necessary that the locking-cylinders *c*, *d*, and *e* should be on the inside of the ring *b*, as shown in Fig. 3. They may with equal advantage be on the outside of said ring *b*, or one or more may be on the inside

and one or more may be on the outside of said ring *b* and produce the desired effect.

In the body *a* of the lock is made a circular recess, *i*, on each side of the ring *b*, wherein a pin, *f*, attached to the ring *b*, is made to move with the ring. The length of the recess *i* is made so that the pin *f* strikes the extreme end of it when the notches *c'*, *d'*, and *e'* are exactly opposite the cylinders *c*, *d*, and *e*.

The locking-cylinder *d* is operated by means of the key *g*, shown in Fig. 5, which is for this purpose provided with a projection, *h*, that engages in a corresponding recess in the cylinder *d*. The key *g* may, however, be constructed in some other suitable way, such as having the stem conical, square, polygonal, &c., whereby the same result is obtained.

For the purpose of operating the cylinders *c* and *e* I attach to their shafts, on the outside of the body *a*, plates *c''* and *e''*, of a shape as shown by the dotted lines in Fig. 1. These plates *c''* and *e''* are made in such a form that the one slides over and covers the other, as shown in Figs. 2 and 3, by which means the key-hole *h'* is effectually concealed from view when the lock is locked, in which case the plates *c''* and *e''* are in a position as shown in full lines on Fig. 1. The dotted lines in Fig. 1 show the position of the operating-plates *c''* and *e''* when the cylinders *c* and *e* are in the unlocked position, as shown in Fig. 3; but it is not necessary that all locks I make of this kind should be made to open at precisely the same position of the operating-plates *c''* and *e''*. On the contrary, I make every lock to open at a different position of the plates *c''* and *e''*, so that the exact position of the operating-plates for the opening of the lock may only be known to the owner or keeper of the lock. The upper end of the key *g* can to advantage be used to push the plate *c''* out of place and in place for the purpose of unlocking or locking the lock when desired.

On the opposite side of the body *a* is a circular plate, *k*, secured of exactly the same outside appearance as the plates *c''* and *e''* are when closed. The only difference is that the plate *k* is solid and stationary and serves simply as a puzzle for parties who might try to pick the lock.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent, and claim—

The combination and arrangement of the circular open ring *b*, having recesses *c' d' e'*, the cylinders *c d e* movable in the body *a*, and the operating-plates *c' e'*, when all are

combined, constructed, and arranged, substantially as herein shown, and for the purpose set forth.

CARL ALFRED WALLIN.

Witnesses:

ALBAN ANDRÉN,
WM. W. HUTCHINSON.