A. DELKESCAMP.

PAD-LOCK.

No. 188,781. Patented March 27, 1877.

Fig. 1.

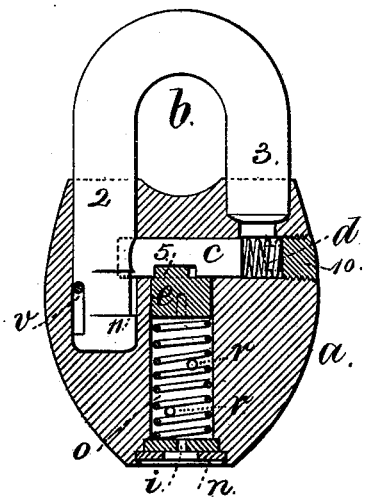


Fig. 2.

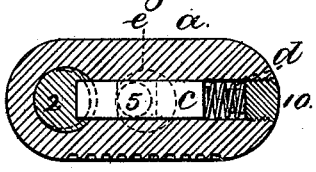


Fig. 3.

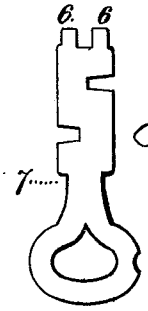
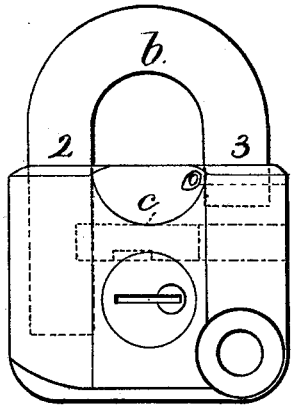


Fig. 4.



Witnesses.

Chas. H. Smith
Geo. D. Pinckney

Inventor.

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atty

UNITED STATES PATENT OFFICE.

ADOLPH DELKESCAMP, OF NEW YORK, N. Y.

IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. **188,781**, dated March 27, 1877; application filed October 26, 1876.

To all whom it may concern:

Be it known that I, ADOLPH DELKESCAMP, of the city and State of New York, have invented an Improvement in Padlocks, of which the following is a specification:

Padlocks have been made with a U-shaped shackle that is drawn out of the lock-case when the tumblers inside the case have been properly placed by the key. This lock is known as the "Scandinavian" or "jail" lock.

My present improvements relate to a lock of a somewhat similar character, but the shackle cannot be drawn entirely out, and it is swung around after being partially drawn out; hence the shackle cannot become disconnected from the lock.

I employ a bolt running transversely to the shackle, which prevents the shackle being drawn partially out of the lock. When this bolt has been retracted the shackle can be drawn endwise and partially revolved. I use a friction-plug and eccentric pin, acted upon by the key to withdraw the bolt. The key is a plate entering a circular hole in the case, and notches corresponding to pins passing across the hole in the case, and a spring and slotted disk are employed in the cylindrical key-hole.

In the drawing, Figure 1 is a vertical section of the padlock complete. Fig. 2 is a plan view of the eccentric pin and plug. Fig. 3 is a detached view of the key. Fig. 4 is an elevation of said lock in a form especially adapted to mail-bags and railway-cars.

The lock-case *a* is made with two parallel sockets, receiving the long and short legs of the U-formed shackle *b*. The long leg 2 of the shackle *b* can slide endwise in its socket sufficiently to allow the short end 3 to be drawn out of its socket, and then swung aside for opening the lock, or the reverse in closing it.

A bolt, *c*, is inserted in a hole in the lock-case at right angles, or nearly so, to the leg 2 of the shackle *b*, and this bolt *c* is projected toward the leg 2 by a spring, *d*, and the end of the bolt enters a recess in said leg 2 to hold said shackle when the lock is closed. A key of suitable character is used to draw this bolt back to allow the shackle to be partially drawn out and swung around. Said key may act directly upon the bolt when the lock is in the form shown in Fig. 4; but when the padlock is in the form shown in Fig. 1 there is a tubular key-recess made in the lock-case parallel with the recess or socket for the leg 2 of the shackle; but said recess opens at the bottom end of the lock-case, and extends up to the transverse bolt *c*. In this recess there is a short cylinder or plug, *e*, with an eccentric pin, 5, entering a slot that runs across the bolt *c*, and in the lower surface of the plug *e* there are two or more holes for the projecting horns 6 6 at the end of said key, so that the plug and eccentric pin can be turned around by the key to force back the bolt *c* and liberate the shackle *b*.

The outer and lower end of the tubular key-recess is provided with a slotted disk, *i*, through which the plate-key passes, and which disk is revolved by the key, the disk being in a shouldered recess in the lock-case; and it is held in place by the flat ring *n*, that has a circular central opening in which the neck portion 7 of the key revolves. This ring *n* is secured in place by the metal of the case being riveted up around its edges.

A helical spring, *o*, extends from the disk *i* to the plug *e*, so as to apply sufficient friction to prevent either one turning except when the proper key is inserted.

In the edges of the plate-key are notches, and in the key-tube there are pins *r* placed in corresponding positions. When the key is inserted it passes flatwise between these pins, and as the key is turned the notches receive these pins; hence, if an improper key is introduced these pins act as wards to prevent it being turned.

There is a pin, *v*, passing transversely of the leg 2 of the shackle through a slot in one side thereof, to prevent the shackle being drawn out of the lock case, and this slot is sufficiently peripheral to allow the shackle to be moved about a quarter turn after being drawn back.

The side of the shackle adjacent to the end of the bolt *c* is recessed, as aforesaid, to receive the end of the bolt; and it is also partially removed, as seen in Fig. 1, so that a stop is formed against the end of the bolt, to prevent the shackle being drawn out of

the lock-case. I remark that the plug 10, that fills the outer end of the hole containing the bolt, also forms a stop to prevent the bolt *c* being forced back sufficiently to be entirely out of the way of the shoulder 11 on the leg 2 of the shackle. There is a partial peripheral groove at the shoulder 11 to allow the shackle to be turned aside, as aforesaid.

One side of the lock-case is made with a projection or roughened, and one edge of the keybow is notched, so as to denote by the feel to a person using the key which way to insert the same, which is a great convenience in the dark.

I claim as my invention—

1. In a padlock, a partially sliding and turning shackle with a recess in the longer leg 2, and partially removed at one side, in combination with the bolt *c*, entering the recess in the leg 2 to lock the shackle, and also forming a stop to prevent the entire withdrawal of the shackle when unlocked, substantially as set forth.

2. The plug or short cylinder 10 and eccentric pin 5, in combination with the bolt *c*, shackle *b*, and recess in the longer leg of said shackle, substantially as set forth.

3. The slotted disk *i*, plug *e*, spring *o*, and bolt *c*, in combination with the shackle *b*, having the leg 2 entering a socket in the case and receiving the end of the bolt *c*, substantially as set forth.

Signed by me this 21st day of August, 1876.

ADOLPH DELKESCAMP.

Witnesses:

GEO. T. PINCKNEY,

CHAS. H. SMITH.