

A. T. BOON.  
Seal-Lock.

No. 169,231.

Patented Oct. 26, 1875.

Fig:1.

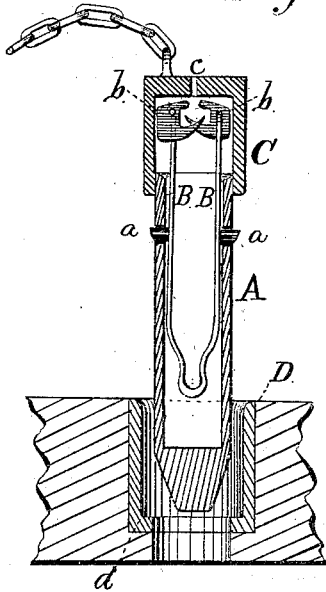


Fig:3.

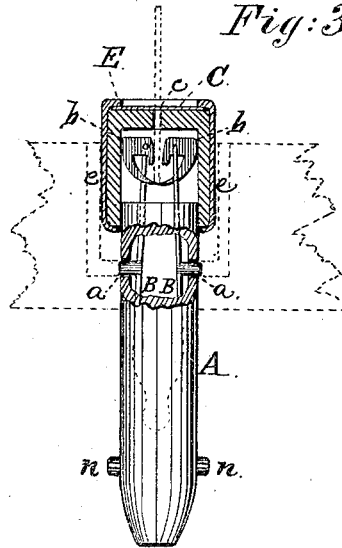


Fig:2

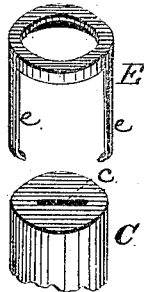


Fig:5.

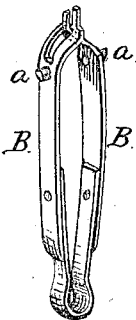
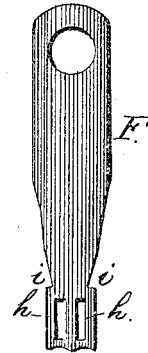


Fig:4.



WITNESSES

*W. Burris*  
*A. Lacey*

By

INVENTOR

*Alonzo J. Boon*

*Gilbert B. Towles* Attorney

# UNITED STATES PATENT OFFICE.

ALONZO T. BOON, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN SEAL-LOCKS.

Specification forming part of Letters Patent No. **169,231**, dated October 26, 1875; application filed August 11, 1875.

*To all whom it may concern:*

Be it known that I, ALONZO T. BOON, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Locks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a longitudinal section of my improved railroad-switch and car lock; Fig. 2, a view of seal-holder detached from the cap of bolt; Fig. 3, a longitudinal section, showing it used as a seal-lock; Fig. 4, a view of key; Fig. 5, a view, showing a slight modification in the construction of spring.

Like letters in all the figures of the drawings indicate like parts.

This invention relates to a lock to be used on freight-cars, bonded warehouses, or on cars containing bonded goods, or as a railroad-switch lock; and it consists of a hollow bolt, having double spring-arms on the inside, provided with tumblers and catches, the end of the bolt being closed by a cap, having a key-hole, in combination with a socket, provided with a shoulder on the inside to receive and hold the said bolt; also, of a seal-holder, in combination with the cap of bolt and socket, so that by means of a piece of paper or thin metal, with or without any device upon it, as may be desired, placed over the key-hole of the cap, the lock can be used as a seal-lock, and cannot, therefore, be unlocked without defacing the seal, as will be hereinafter more fully explained.

A is the hollow bolt; B B, the double spring-arms, having catches *a a* made to project through holes in the side of the bolt. Tumblers *b b*, constructed as shown in Fig. 1, are pivoted to the ends of the arms; C, the cap, provided with a key-hole, *c*, and attached to the end of the bolt, the opposite end thereof being closed; D, the socket, provided with a shoulder, *d*, on the inside, to receive and hold the bolt; and E, the seal-holder, which consists of a flanged collar, with arms *e*, having turned-in ends, made to fit and embrace the

cap, the turned-in ends catching under the lower edge of the cap when the bolt is inserted into the socket, so that the collar cannot be removed until the bolt is unlocked by the key. The key F consists of a flat piece of metal, provided with slots *h h* to allow the points of the tumblers *b b* to turn in them when pressed down by the key to unlock the bolt. The key is also provided with shoulders *i i* on the edges, so that, by tipping the key to one side, the shoulder will catch under the end of the slot or key-hole, and the key thus made to draw the bolt out of the socket. The bolt is provided near its end with pins *n n* to prevent it from being withdrawn from the socket, thus obviating the use of a chain.

If desired, the bolt can be used without the seal-holder, (see Fig. 1,) the bolt in that case being secured to a chain, and the pins *n n* dispensed with.

The operation is as follows: The bolt is locked by pushing it into the socket, the ends of the catches being beveled so as to easily pass and spring under the shoulder *d*. To unlock the bolt, the key is inserted in the hole or slot *c* of the cap, and pressed down upon the arms of the tumblers, and forcing their corner ends against the sides of the bolt causes the arms of the spring to press in and release the catches from under the shoulder, when, by tipping the key to one side, so that the shoulder thereof will catch under the end of the slot *c*, the bolt can be readily withdrawn from the socket.

To use the lock as a seal-lock, a round piece of paper or thin metal of the size of the top of the cap is placed over the key-hole *c*, and the collar adjusted on the cap, with its flange made to hold the paper, and its arms extending down with their turned-in ends under the edge of the cap, when the bolt is then pushed into the socket, and locked by the catching under its shoulder, as before described. Thus the collar cannot be removed, or the bolt unlocked, without defacing the seal.

In using the lock as a switch-lock, the socket is dispensed with, as the catches can be made to catch below or on the farther side of switch-bar, the lock acting as a pin-lock.

The construction of the lock can be complicated, so as to use most any kind of a key.

As, for instance, Fig. 5 represents a modification of the spring, between the upper ends of which a cam can be placed, and made to turn by means of a common key. Also, the catches can be placed near the point of bolt, and the arms of the spring arranged to have a pivotal joint with each other, which would operate just the same as the spring already described.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The combination of a hollow bolt, having double spring-arms B B, provided with tumblers *b b* and catches *a a*, and cap C, provided with key-hole, substantially as and for the purpose set forth.

2. The combination of a hollow bolt, having double spring-arms, provided with tumblers *b*

*b* and catches *a a*, cap C, and socket D, substantially as and for the purposes set forth.

3. The combination of a seal-holder with a hollow bolt, A, having a locking mechanism on the inside, and socket D, for securing the seal-holder, substantially as and for the purpose set forth.

4. The key F, provided with shoulders *i i*, in combination with slot *c* of cap C of the bolt A, substantially as set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

ALONZO T. BOON.

Witnesses:

NELSON YOUNG,  
C. S. POMEROY.