

(No Model.)

P. H. CONGER.
SEAL LOCK.

No. 476,250.

Patented June 7, 1892.

Fig. 1.

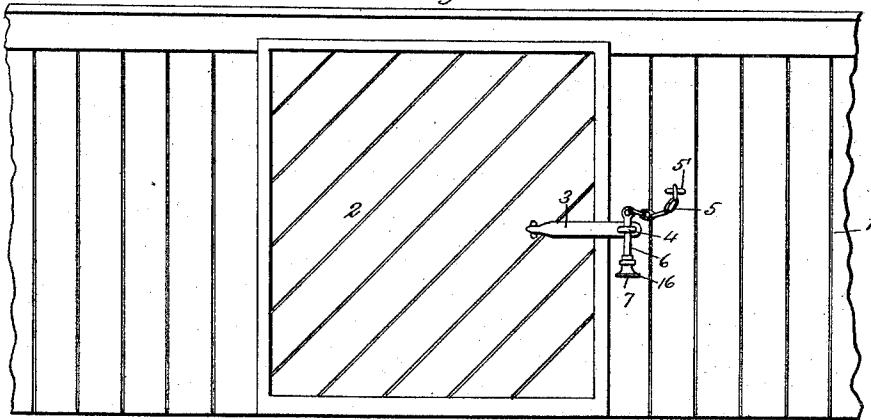


Fig. 2.

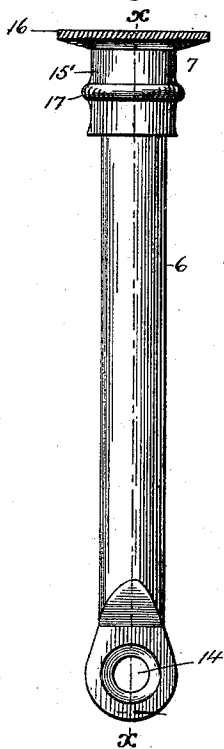


Fig. 3.

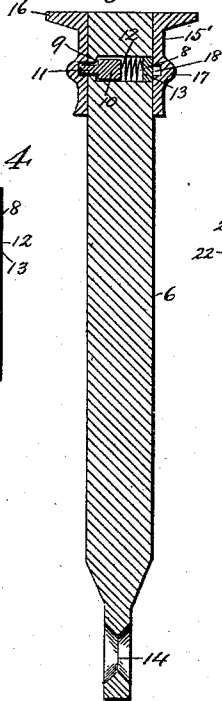


Fig. 4.

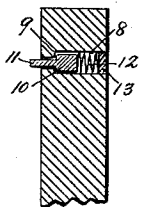


Fig. 5.

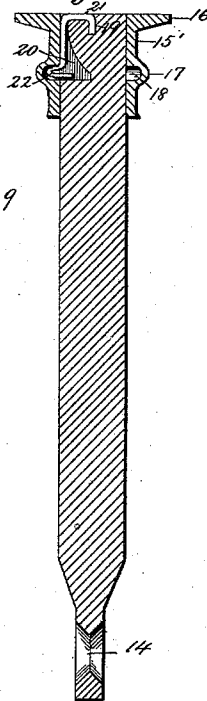
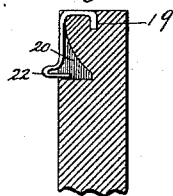


Fig. 6.

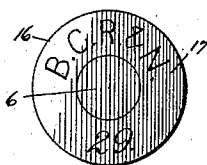


WITNESSES:

T. R. Stuart.

H. M. Marble.

Fig. 7.



INVENTOR

P. H. Conger.

BY *H. M. Marble*

ATTORNEY.

UNITED STATES PATENT OFFICE.

PATRICK H. CONGER, OF WATERLOO, IOWA.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 476,250, dated June 7, 1892.

Application filed December 11, 1891. Serial No. 414,677. (No model.)

To all whom it may concern:

Be it known that I, PATRICK H. CONGER, a citizen of the United States, residing at Waterloo, in the county of Black Hawk and State of Iowa, have invented certain new and useful Improvements in Seal-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates generally to locks, but particularly to that class which are known as "seal-locks," and which are especially adapted for locking and sealing the doors of freight-cars, warehouses, mail-bags, and the like.

The objects of my invention are to provide a lock of the character named which is simple in construction, easily and readily understood and applied, and cheaply manufactured, and at the same time afford a secure fastening for the door or other object upon which it is placed. These objects are attained by the mechanism illustrated in the accompanying drawings, forming a part of this specification, in which the same reference-numerals indicate like parts throughout the description, and in which—

Figure 1 represents a side elevation of a part of a freight-car, showing the door closed and locked by means of my invention; Fig. 2, an enlarged elevation of my improved lock, the retaining-chain being removed therefrom; Fig. 3, a vertical section of the same, taken on the line *x x* of Fig. 2; Fig. 4, a broken vertical section of the bolt, showing particularly the spring-actuated pin or latch by means of which the head or cap is retained in its proper position when the parts are put together; Fig. 5, a vertical section of a modified form of my invention; Fig. 6, a broken vertical section of the same with the cap removed; and Fig. 7, a plan view of the cap, showing particularly the manner of stamping the same with the initials of the ownership of the car and also the number of the station where the car is locked.

In the drawings the numeral 1 indicates the body portion of a freight-car; 2, the door, which is shown closed and provided with an ordinary hasp 3, such as are placed upon the doors of freight-cars and which when the door is to be locked and sealed is placed over the staple 4 in the ordinary and usual manner.

At a suitable point on the body of the car and in close proximity to said hasp is secured, by means of a short chain 5 and staple 5', the bolt 6, which is provided with the locking mechanism and removable cap 7, the operation of which will be more fully hereinafter described.

Near one end the bolt 6 is provided with the recess or aperture 8, which is of differing diameters and which extends horizontally or at right angles to its length entirely through the bolt. At a point 9 said recess is reduced in diameter, thus forming a shoulder or bearing for the pin or latch 10. The latch 10 is made to conform to the general contour of the aperture 9, but is much shorter, the small end 11 thereof extending a short distance beyond the periphery of said bolt, as clearly shown in Figs. 3 and 4. At the rear end of the latch 10 and within the recess 8 is placed the small spiral spring 12, which is securely held therein and caused to press against said latch by means of the plug 13, which, after said latch and spring have been placed in their respective positions, is irremovably secured in the outer end of the recess by brazing or otherwise, and thus prevents said latch and spring from being removed. At the opposite end of the bolt 6 is formed the eye 14, to which is attached one end of the short chain 5, the other end of said chain being secured to the staple 5', as heretofore described.

The head or cap 7 is formed with the flange 16, the outer or flat surface thereof being used for the purpose of marking thereon the initials of the owner of the car as well as the number of the station. Said head or cap 7 may be made of any suitable material, such as glass or other frangible material, but preferably of cast metal, and is formed with the sleeve 15' and having an opening entirely through the same, by means of which said cap or head is placed upon the end of said bolt. The head or cap may be formed with a solid end surface and the flange thereon, as shown, and provided with a recess therein, which will fit over the end of the bolt. This latter construction of the cap or head is preferably used with the modified form of my invention. At or near the middle of the said head or cap is formed the bead or enlargement 17, which on its inner side, or that por-

tion of the cap which fits over the bolt, is formed with the groove 18, which extends entirely around and into said bead, said groove being of sufficient depth to leave but very little metal between the inside of the groove and the periphery of said bead.

When it is desired to lock and seal the door of a car, warehouse, &c., the bolt 6 is inserted into the staple 4 from its upper side, the cap or head then being placed on its lower end by depressing the pin or latch sufficiently to allow the cap or head to slide smoothly over the same until the groove 18 is reached, when the action of the spiral spring 12 upon the pin or latch 10 causes the same to be pressed forward and its front or small end to enter the groove 18, and thus lock said bolt and cap firmly together and also prevent the door from being opened. When it is desired to open the door, the bead or enlargement 17 of the cap or head 7 is struck a sharp blow with a hammer or other suitable instrument, and, being of frangible material, but preferably of cast metal, will cause the same to be broken and thus release the pin or latch 10 from engagement therewith.

In the modified form of my invention shown in Figs. 5 and 6 all the parts are constructed precisely the same as those shown and described in Figs. 1, 2, 3, and 4, with the exception of the head or cap and the means for locking the same to the bolt.

In my modified form, instead of forming the bolt 6 with the recess or aperture 8 and fitting therein the pin or latch 10 and spiral spring 12, I provide the bolt in its upper end with the vertical recess 19, with a horizontal slot 20 running therefrom to the periphery of said bolt, and thence downwardly or vertically and inwardly to about the center of the bolt. Into the recess 19 is inserted one end of the spring catch or latch 21, which is bent to conform to the upper portion of said slot 20, thence downwardly and formed at its lower end with the knuckle 22, the bend of which normally protrudes a short distance beyond the periphery of the bolt. When it is desired to place the cap upon the end of the bolt, the knuckle 22 is depressed as described in relation to the pin or latch 10, and the head is permitted to slide

down over the same, when as soon as the slot 18 is reached said knuckle will spring forward, and thus firmly hold the cap and bolt together, as before described.

It is obvious from the foregoing description that many minor changes can be made in the construction and operation of my invention, and I do not confine myself to the exact construction as illustrated; but,

Having fully described and illustrated the principle of my invention, what I claim as new is—

1. In a seal-lock, the combination, with a bolt provided at one end with an eye or loop and having near the other end a recess or chamber for the insertion of a pin, spring, and a plug, of a cap or head open at both ends and having a circumferential groove midway of the sleeve portion for the reception of the locking pin or latch, substantially as described.

2. In a seal-lock, the combination, with a bolt having a loop or eye at one end and a recess or aperture near the other end of differing diameters for the insertion and securing of a movable pin, spring, and a plug, of a cap or head provided with a circumferential groove midway of the sleeve for the reception of one end of the locking-pin, substantially as described.

3. As an article of manufacture, a seal-lock consisting of and comprising a bolt with an eye or loop at one end and having near its other end a recess or chamber, in which is secured a movable pin resting on a spiral spring, said spring in turn resting upon an immovable plug, and a cap or head open at both ends, having a circumferential flange at one end and a circumferential groove midway of the sleeve portion of the same for the reception of the projecting end of the movable pin or latch secured in the bolt, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

PATRICK H. CONGER.

Witnesses:

W. H. BARNES,
TOM R. STUART.