(Model.)

L. MASON.

SEAL LOCK.

No. 361,434. Patented Apr. 19, 1887.

Fig. 1.

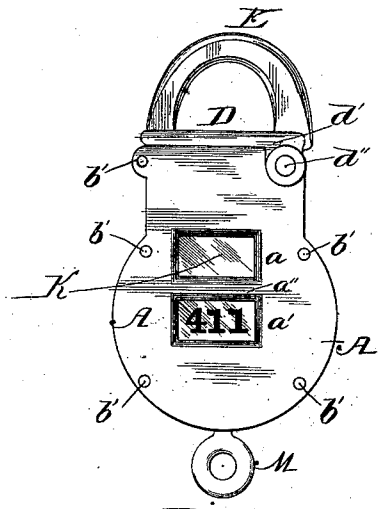


Fig. 2.

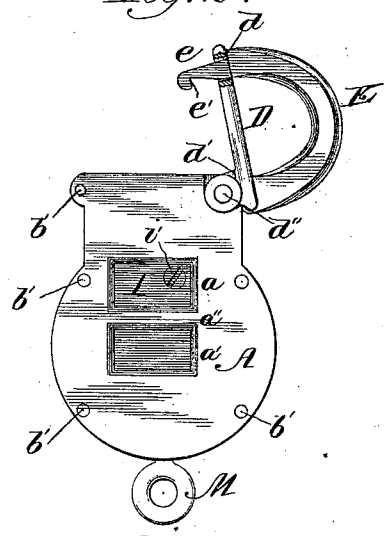


Fig. 3.

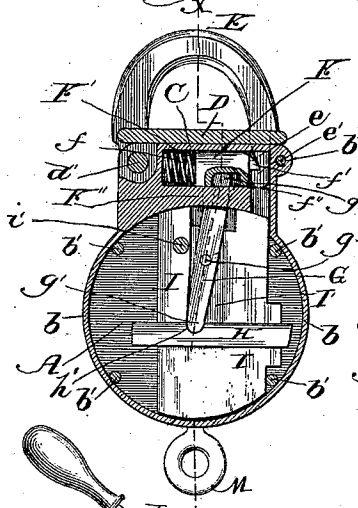


Fig. 5.

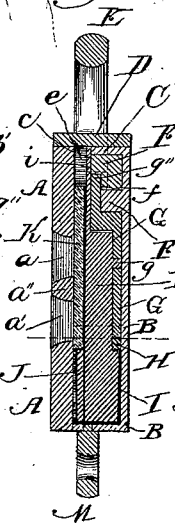


Fig. 4.

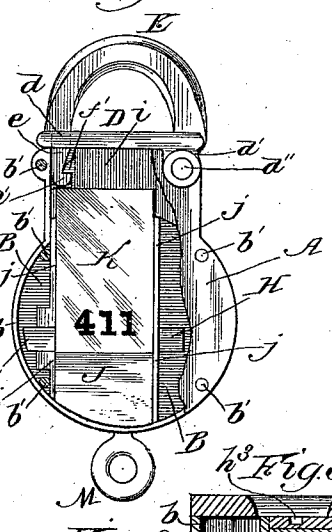


Fig. 7.

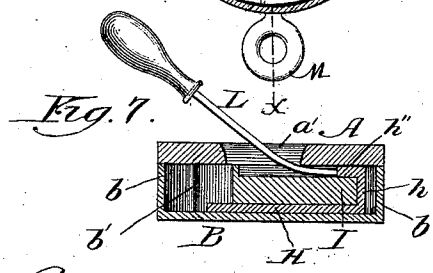


Fig. 9.

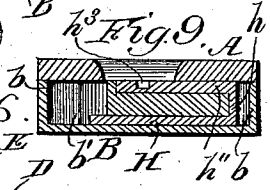


Fig. 6.

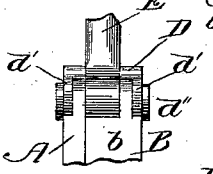
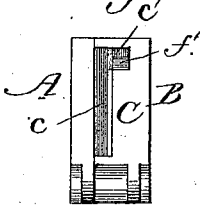


Fig. 8.



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UNITED STATES PATENT OFFICE.

LEWELLYN MASON, OF CHICAGO, ILLINOIS.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 361,434, dated April 19, 1887.

Application filed August 10, 1886. Serial No. 210,531. (Model.)

To all whom it may concern:

Be it known that I, LEWELLYN MASON, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Seal-Locks, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation showing the seal in place and the shackle locked; Fig. 2, a front elevation showing the shackle and seal-plate raised for the insertion of the seal; Fig. 3, a sectional elevation through the back of the lock when locked; Fig. 4, an elevation with the front plate partly broken away, showing the seal and the parts in their locked position; Fig. 5, a sectional elevation on line *x x* of Fig. 3, with the back plate in place; Fig. 6, a detail showing the hinge of the seal-plate and shackle; Fig. 7, a detail, being a cross-section of the lock, showing the manner of withdrawing the bolt to release the shackle; Fig. 8, an end elevation with the shackle and seal-plate removed. Fig. 9 is a cross-section of the lock, showing a modification in the mechanism for withdrawing the bolt.

This invention relates to seal-locks for cars, safes, packing-trunks, and other receptacles which are to be sealed to guard against being opened while in transit or otherwise, and has for its objects to construct a seal-lock which can be applied to a receptacle to be sealed as readily and quickly as an ordinary padlock, and which cannot be unlocked until the seal which it carries has been broken; to improve the device by which the seal is locked or held in place after being inserted; to improve the construction and operation of the devices by which the shackle is locked, and to improve the construction and operation of the lock as a whole; and its nature consists in the several parts and combination of parts hereinafter described, and pointed out in the claims as new.

In the drawings, A represents the front plate, made of brass or other suitable material, and, as shown, formed of a circular portion with a neck or extension on one side and having openings *a a'*, divided by a cross-bar, *a''*, through which openings the marks on the seal can be observed.

B is the back plate, similar in shape to the front plate, A, and made of brass or other suitable material and having around its sides and ends a flange, *b*, to form a chamber for the reception of the releasing devices of the bolt.

C is a cap extending from flange to flange *b* and filling the space between the flanges, but leaving a slot, *c*, for the passage of the seal and a hole or opening, *c'*, for the passage of the hooked end of the shackle. This cap C can be cast or formed with the back plate, B, and its flange *b*, and, as shown, studs or rivets *b'* project out from the back plate, B, adjacent to the flange *b*, and above such flange, a sufficient distance to pass through the plate A and have their ends riveted or upset to attach the plate A in position.

D is a seal-plate for retaining the seal in place when inserted. This plate D, at one end, has a hole, *d*, for the passage of the hooked end of the shackle, and its other end is provided with ears *d'*, for hinging or pivoting the plate D to the plates A B, which plates, in the construction shown, each have at the corner where the ears *d'* are located semicircular recesses, as shown in Fig. 6, to form a smooth finish for the exterior of the lock..

E is the shackle, one end of which is pivotally connected to the flange *b* by the pin or pivot *d''*, which also attaches the seal-plate D in position, the end of the shackle lying in the slot therefor in the flange *b*, and the seal-plate D being also slotted to receive the shackle and allow said shackle and seal-plate to be opened and closed. This shackle E, at its free end, has a tongue, *e*, with a notch or recess, *e'*, to engage the bolt when the shackle is closed. The shackle E and seal-plate D are securely held or fastened at their pivot end by riveting down the ends of the pin *d''*, or in any other suitable manner.

F is a bolt located in the chamber or recess F' in the neck or extension of the case between the cap C and the wall F'', as shown in Fig. 3, and the bolt is thrown forward by a spring, *f*, located in recess F', between the end of the bolt and the end wall of the recess, as also shown in Fig. 3. The spring *f* is sufficiently strong to hold the bolt in engagement with the shackle E and resist the throwing back of the bolt by a blow on the exterior of the case or on the shackle. The bolt F at its acting

end has a catch, f', to engage with the notch or recess e' of the shackle E when the shackle is closed, as shown in Fig. 3, and the under face of the bolt F is provided with a recess, f'', to receive the end of the unlocking or releasing arm or lever.

G is the unlocking-arm, pivoted at or near its center and having an end, g'', to enter the recess f'', to operate the bolt F. The other end, g', engages with a sliding bar, by means of which the arm G is turned on its pivot g, and this arm G is located on the rear face of the frame or support by which it is held, and its end g'' is, in the form of construction shown, turned so as to pass under the wall F'' and enter the recess f'' in bolt F.

H is a sliding bar having a notch h' to receive the end g' of the arm G, and having one end, h, turned to pass around the edge of the frame or support which carries the arm G and bar H, and its end h is turned to have an end, h'', to lie between the plate A and the frame or support for the sliding bar, as shown in Fig. 7. The sliding bar H is located to have the end h'' thereof in line with the opening a' in the arrangement shown, so that when the seal is broken a proper instrument can be inserted beneath the plate A at the opening a' to engage the end h'' and force the slide back to turn the arm G and withdraw the bolt F, as shown in Fig. 7. If desired, the end h'' of the bar H may be extended across the opening a' and have a notch, h^3, as shown in Fig. 9, to receive the end of a suitable instrument for forcing the sliding bar back.

I is the frame or support for the arm G and bar H. This support has a groove or recess, I', in which is located the arm G, and a cross-groove to receive the slide H. This support I has an extension, i, which extends over the end g'' of the arm G and the bolt F, as shown in Figs. 4 and 5, and the support is locked to the back plate, B, by suitable screws, i', passing through the support and entering the plate B, as shown in Fig. 3, or in some other suitable manner that will secure the support I in position.

J is a plate located between walls j on the front side of the support I, and serves as a support for the seal K, the lower edge of said seal resting upon the upper edge thereof, as seen in Fig. 5.

K is the seal, formed of a piece of glass or other transparent material, with a backing of paper or otherwise, having thereon letters or figures to indicate the party using the seal and the number of the seal. This seal, when in place, lies between the walls j of the support I, with its lower end resting on the edge of plate J, and it is inserted in place by being pushed through the slot c of the cap C when the seal-plate D and shackle E are raised, as shown in Fig. 2.

The parts are assembled by dropping the bolt F into its recess F' and inserting the spring f between the end of the bolt and the end wall of the recess. The slide H is dropped into its groove in the support I, and the bar or lever G is placed into position on its pivot g, with its end g' in the notch h' of the bar H. The support I is placed in position on the plate B, with the end g'' of the arm G entering the recess f'' of bolt F, and the support is then secured firmly in place by the screws i', or in some other suitable manner, which holds the sliding bar H and arm G in place. The plate A is slipped onto the pins b' and secured in place by riveting or striking down the ends of the pins. The ears d' of the seal-plate D are placed in the recesses therefor on the plates A B, and the shackle is placed in position so that the pin d'' can be pushed through the ears d' of the seal-plate and the end of the shackle and have its end riveted or struck down to hinge the seal-plate D and shackle E in place on the lock.

After the parts are assembled, the lock is made ready for use by inserting the seal K through the slot c when the shackle and seal-plate are raised, as shown in Fig. 2, and in use the seal-plate D is dropped down to lie on top of the cap C over the slot c, and the shackle E is passed through the staple which receives it, and the end e is forced through the opening d in the seal-plate D and the opening c' in the cap C until the notch e' is caught by the catch f' of the bolt F, which holds the shackle against withdrawal until the bolt F is receded, and the same is allowed to yield for the passage of the end e of the shackle by the spring f, which spring, when the bolt is engaged with the shackle, maintains the engagement until the bolt is forced back, which can only be done by breaking the seal K. When the seal is broken, a tool, L, formed of a piece of wire or other material and adapted to have its end pass between the plate A and support I, is used to move the bolt. The end of the tool L is forced against the end h'' to carry the sliding bar H in the direction to force the end h away from the support I, and this movement of the slide carries with it the end g' of the arm G, causing the end g'' of the arm to withdraw the bolt F and disengage the catch f' from the notch e', so that the shackle E and seal-plate D can be raised. The broken seal can be withdrawn through the slot c when the seal-plate D and shackle E have been raised, and a new seal inserted for the next use of the lock.

As shown, an eye or loop, M, is provided to receive a chain for attaching the lock to the car or other receptacle with which it is to be used.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a shackle, E, and a locking-bolt, F, the arm G and a slide for withdrawing the bolt from engagement, substantially as specified.

2. The plate A, having a sight-opening, plate B, with flange b, cap C, with slot c and

opening c', seal-plate D, and shackle E, in combination with a bolt, F, arm G, and slide H, for forming a lock to receive a seal, substantially as specified.

3. The support I, carrying on one side the arm G and slide H and grooved on its opposite side to receive a seal, in combination with a shackle, E, and locking-bolt F, substantially as and for the purposes specified.

4. The combination, with the lock-casing A B, the shackle E, locking-bolt F, support I, and the seal K, of the plate J, located between the walls j on the front side of the support I and serving to support said seal, substantially as described.

5. The plate A, having a sight-opening, plate B, with flange b, cap C, with slot c and opening c', seal-plate D, and shackle E, in combination with the bolt F, arm G, slide H, support I, plate J, and seal K, substantially as and for the purposes specified.

LEWELLYN MASON.

Witnesses:
HARRY T. JONES,
ALBERT H. ADAMS.