No. 657,742. Patented Sept. 11, 1900.

G. W. LEWIS.

SEAL LOCK.

(Application filed Dec. 5, 1899.)

(No Model.)

Fig. 1.

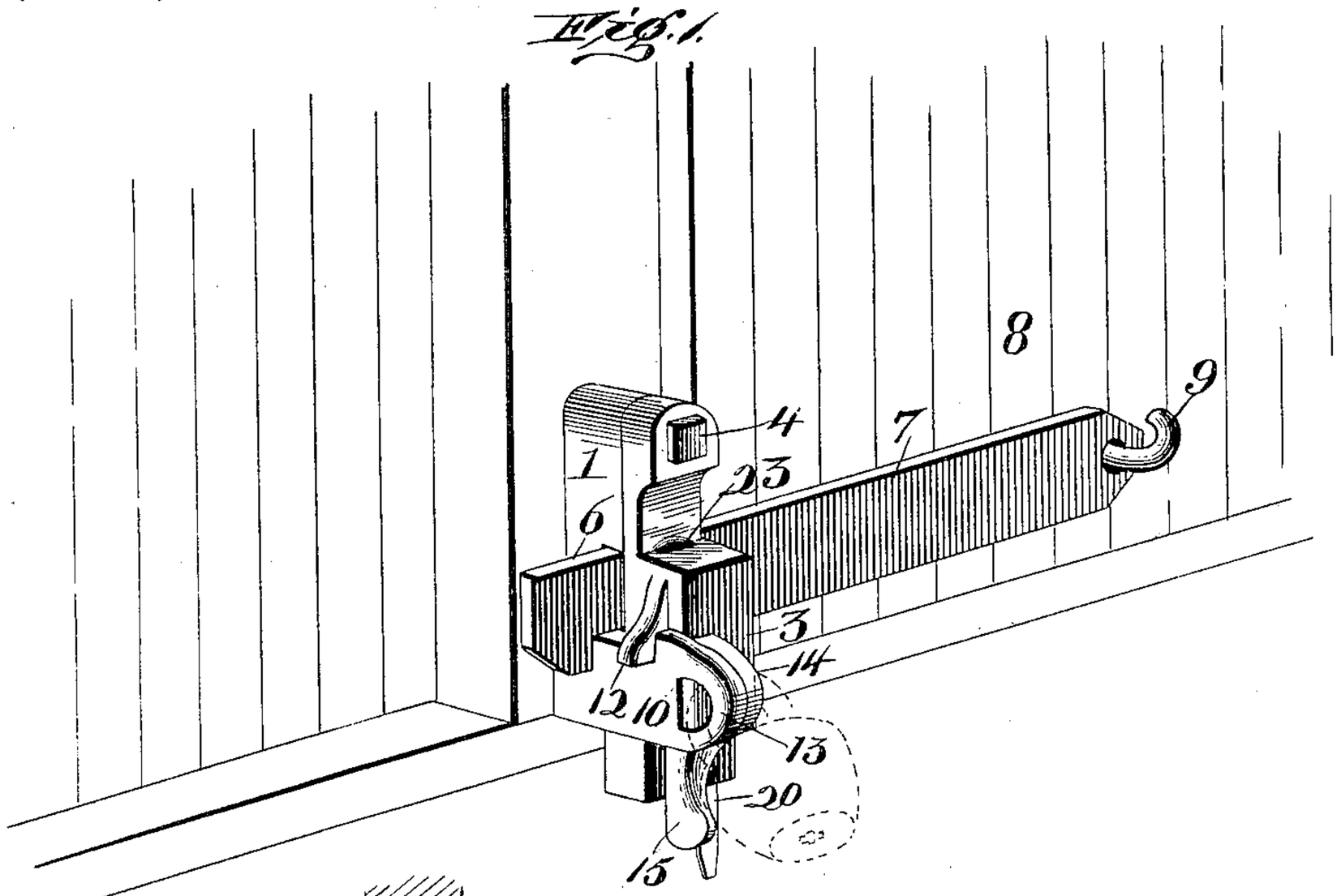


Fig. 2.

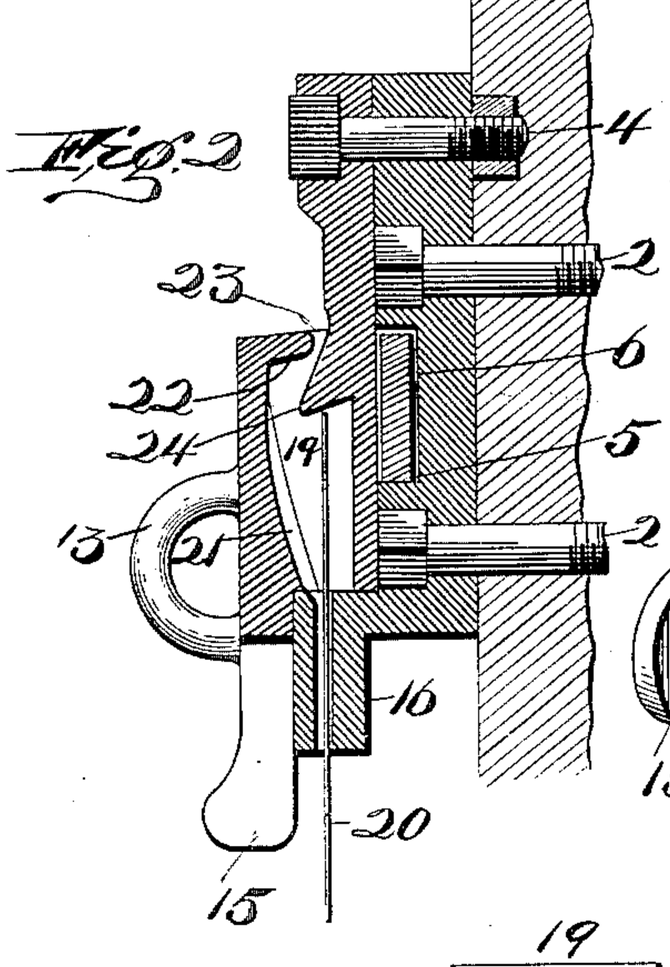


Fig. 3.

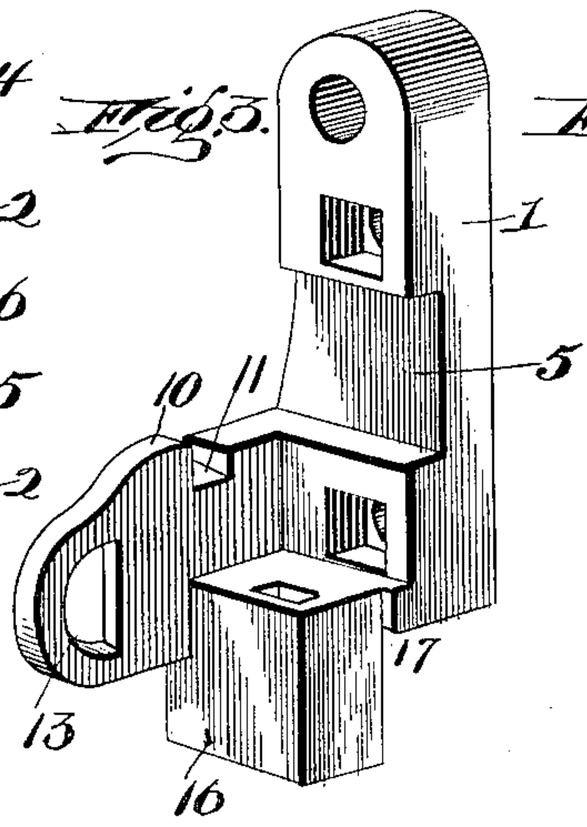


Fig. 4.

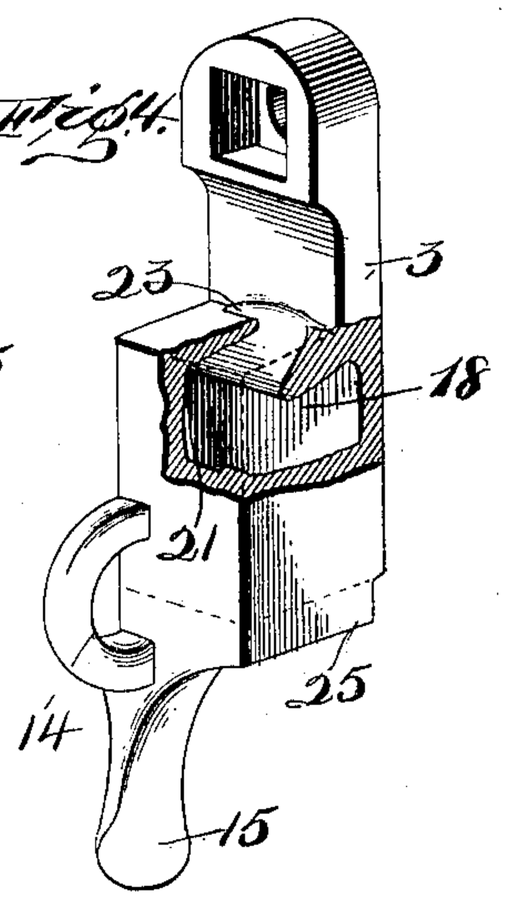
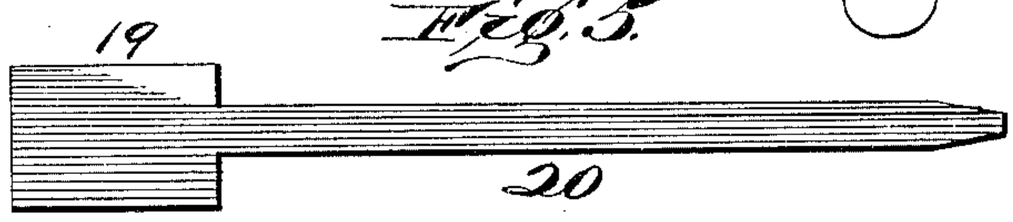


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE W. LEWIS, OF PORTSMOUTH, VIRGINIA, ASSIGNOR OF TWO-THIRDS TO W. R. ROBINSON AND S. M. LEWIS, OF SAME PLACE.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 657,742, dated September 11, 1900.

Application filed December 5, 1899. Serial No. 739,279. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. LEWIS, a citizen of the United States, residing at Portsmouth, in the county of Norfolk and State of Virginia, have invented a new and useful Car-Door Lock and Seal, of which the following is a specification.

My invention relates to car-door seal-locks, and particularly to a device of simple construction adapted for securing the hasp of a car-door in such a manner as to prevent the release thereof except by breaking a seal of peculiar construction, which is adapted to be applied to the lock with which it is used without recourse to a sealing-iron or without necessitating the employment of tools in its application, the said lock being for purposes of simplicity and cheapness of manufacture constructed of the minimum number of parts.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a lock constructed in accordance with my invention applied in the operative position to a car-door. Fig. 2 is a vertical central section of the lock with the seal arranged in operative position therein. Fig. 3 is a detail view in perspective of the fixed member or base-plate of the lock. Fig. 4 is a similar view of the movable member or securing-block of the lock partly broken away. Fig. 5 is a detail view of the seal detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The seal-lock embodying my invention comprises a fixed member or base-plate 1, which is adapted to be secured, by means of bolts 2, to the jamb or frame of a car-door opening, and a movable member or securing-block 3, which is pivotally mounted upon said fixed member by means of a pivot-bolt 4. The fixed member is provided with a transverse hasp-seat 5 for the reception of the reduced portion 6 of a swinging hasp 7, adapted to be mounted upon a car-door, of which a portion is shown at 8, by means of a staple 9. The depth of the hasp-seat is sufficient to receive the hasp and allow the exterior surface of the latter to be flush with the corresponding surface of the fixed member or base, as shown in Fig. 2, this exterior surface of the fixed member forming a seat for the movable member, and the swinging movement of said movable member is limited, when it reaches its operative position, by means of a stop-ear 10, which is provided in its upper edge with a notch 11 to receive a lateral lug or projection 12 on the movable member. This lug when in engagement with the notch of said stop-ear prevents outward or forward deflection of the movable member, due to an outward strain applied to the hasp through the door or otherwise, and thus relieves the pivot-bolt of said movable member of a portion of the strain due to outward pressure of the hasp. The stop-ear is preferably extended forwardly and perforated to form a shackle or seal-eye 13, and the front side of the movable member is provided with a corresponding eye 14, which is arranged in contact with the eye 13 when the movable member is in its normal or operative position, whereby the registering eyes may be engaged by the shackle of a padlock (indicated in dotted lines in Fig. 1) or by a seal of the ordinary construction. (Not shown.) The movable member terminates at its lower free end in a finger-hold 15, which is adapted to be grasped to displace said movable member to release the hasp preparatory to opening the door.

The lower end of the fixed member of the lock is provided with a forwardly-projecting enlargement 16, forming at its upper end a shoulder 17, in contact with which the lower end of the body portion of the movable member is arranged when the parts are in their normal positions, the body portion of the movable member being hollow, with the cavity 18 therein forming a seal-seat. This seal-seat is of a width equal to the laterally-enlarged portion or head 19 of a seal 20, the body portion of said seal consisting of a shank or tongue equal in thickness with the head and preferably having parallel lateral edges. Furthermore, the enlargement 16 at the lower end of the fixed member is provided with a seal-seat extension equal in width with the tongue or shank of the seal and with which said main seal-seat registers when the movable member of the lock is in its normal position, whereby when the head of a seal is located in the main seal-seat said tongue or

shank may be extended through the seal-seat extension to lock the movable member in its normal position and prevent its displacement without breaking or injuring the seal. The seal-seat extension is open at the lower end of the enlargement to allow the extremity of the seal tongue or shank to protrude, as shown in Fig. 1.

The main seal-seat or seal-head seat is of such a construction as to allow the seal to be introduced through its upper end, the tongue or shank being inserted first, but is also adapted to prevent the removal of the seal through the same opening. The seal-head seat is provided in its front wall with a channel 21, approximately equal in width with the seal tongue or shank, the same being reduced in depth toward its upper end to bring the floor of the channel flush with the seal-head seat at a point contiguous to a shoulder 22 near the upper end of the cavity in the movable member, and in this shoulder contiguous to the rear wall of the cavity is formed an inlet-slit 23 of sufficient width to allow the head of the seal to pass as the seal is introduced into the cavity. Furthermore, projecting forwardly from the rear wall of the cavity in the movable member is a guard-shoulder or projection 24, arranged below the plane of said inlet-slit, whereby after the introduction of a seal if the latter is drawn downwardly a sufficient distance to arrange the upper edge of the seal-head below the plane of said guard-shoulder the guard-shoulder is in the path of any attempted upward movement of the seal and by extending forwardly beyond the inlet-slit prevents the head of the seal from reaching said inlet-slit. Thus after a seal has been introduced and drawn down into the cavity to arrange its upper end below the plane of the guard-shoulder it cannot be removed. This guard-shoulder is preferably undercut or inclined upwardly toward the rear wall of the cavity or main seal-seat, while the front wall of the cavity is inclined downwardly and rearwardly to cause the upper end of the seal to swing rearwardly under the guard-shoulder when said upper end reaches a point below the plane of the guard-shoulder. The seal-seat extension which is formed in the enlargement 16 of the fixed member of the lock registers with the channel formed in the front wall of the main seal-seat to facilitate the insertion of the lower end of the seal tongue or shank thereinto when introduced downwardly through the inlet-slit at the upper end of the main seal-seat. In addition to the above construction I also preferably provide the body portion of the movable member with a depending guard-ear 25, which when the said movable member is in its normal or operative position bears against the side of the enlargement 16, and thereby prevents the introduction of a tool calculated to guide the upper end of the seal in any attempt to push the seal upwardly and thereby remove it from the seat.

The seal may be constructed of paper or cardboard, tin, or any equivalent material having flexibility sufficient to allow it to bend as it is introduced through the tortuous or irregular inlet-passage leading to the main seal-seat and yet sufficient resilence to cause it to resume an approximately straight shape after the upper end thereof has passed beyond the guard-shoulder, whereby a subsequent attempt to back the seal through the same passage is prevented by the contact of its upper extremity with the guard-shoulder.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. In a seal-lock, the combination of a fixed member provided with a stop-ear at one side of a hasp-seat and with a seal-socket below the hasp-seat, and a swinging member also provided with a seal-socket and pivoted to the fixed member for adjustment thereon to bring the two seal-sockets into vertical registration, said swinging member engaging with the stop-ear of the fixed member and held thereby against lateral outward pressure, substantially as described.

2. A lock having a fixed member provided with a hasp-seat and a contiguous stop-ear provided in one edge with a notch, and a movable member pivotally mounted upon the fixed member to swing over the hasp-seat and limited in its movement by said stop-ear, said movable member being provided with a lateral lug to engage the notch of the stop-ear, substantially as specified.

3. A lock having a fixed member provided with a hasp-seat, and a movable member pivotally mounted upon the fixed member, said movable member being provided with a cavity forming a seal-seat, and the fixed member being provided with a seal-seat extension with which the cavity of the movable member registers when the latter is in its normal position, and said movable member being further provided with a guard-ear to prevent access to the seal-seat and extension, substantially as specified.

4. A seal-lock comprising a fixed member having a vertical seal-socket, and a movable member arranged to overlap the seal-socket in the fixed member and provided with a vertical seal-socket open at its top and bottom, said movable member also having an offset extending across and within said seal-socket to partly close the upper end thereof and lying in the path of a seal inserted in the socket, whereby a seal may be inserted endwise from the top of the lock and the offset therein restrains the seal from upward withdrawal.

5. A lock having a fixed member and a movable member pivotally mounted upon the fixed member and provided with a cavity forming a main seal-seat to register with a

seal-seat extension in the fixed member, when the movable member is in its normal position, the main seal-seat being accessible at the end opposite to said seal-seat extension through an inlet-passage of tortuous or irregular construction, substantially as specified.

6. A lock having a fixed member provided with a seal-seat extension, and a movable member pivotally mounted upon the fixed member and having a cavity forming a main seal-seat adapted to register with said seal-seat extension when the movable member is in its normal position, the main seal-seat being accessible at the end opposite to said seal-seat extension for the introduction of a seal, and having an interior guard-shoulder extending across the inlet-opening to prevent the movement of the seal in a reverse direction through the inlet-opening, substantially as specified.

7. A lock having a fixed member provided with a shoulder-cord to form a seal-seat extension, and a movable member having a cavity open at one end for closure by said shoulder of the fixed member when the movable member is in its normal position, and also having an opposite opening for the introduction of a seal, and a guard-shoulder in the cavity of the movable member to cover said inlet-opening, said movable member arranged to be shifted in a path across the plane of the alined seal-seats of the two members, substantially as specified.

8. A lock having a fixed member provided with a shoulder which is cored to form a seal-seat extension, and a movable member pivotally mounted upon the fixed member and provided with a cavity open at one end for closure by said shoulder of the fixed member, and having at the opposite end an inlet-opening, of less depth than the cavity and located contiguous to one wall thereof, and a guard-shoulder located within the cavity and projecting from said wall contiguous to which the inlet-opening is formed to cover the inlet-opening, substantially as specified.

9. A lock having a fixed member provided with a shoulder cored to form a seal-seat extension, and a movable member pivotally mounted upon the fixed member and provided with a cavity open at one end to register with said seal-seat extension, the cavity being of greater width than the seal-seat extension and being provided at the opposite end from said shoulder of the fixed member with an inlet-slit and a contiguous guard-shoulder, in combination with a seal adapted to be introduced through said inlet-slit, and having a tongue or shank adapted to extend through said seal-seat extension, and a head of greater width than the tongue or shank to occupy the cavity of the movable member, substantially as specified.

10. A lock having a fixed member provided with a shoulder cored to form a seal-seat extension, and a movable member provided with a cavity forming a main seal-seat adapted to be closed at one end by the shoulder of the fixed member when the movable member is in its normal position, said main seal-seat being provided at the opposite end with an inlet-slit and a contiguous guard-shoulder, and having its wall opposite to said guard-shoulder inclined inwardly and provided with a channel to register with the seal-seat extension, substantially as specified.

11. A lock having a fixed member provided with a shoulder cored to form a seal-seat extension, and a movable member pivotally mounted upon the fixed member and provided with a cavity forming a main seal-seat of greater width than the seal-seat extension, said cavity being open at one end for closure by the shoulder of the fixed member when the movable member is in its normal position, and being provided at the opposite end with an inlet-slit and a contiguous guard-shoulder, and being also provided in the wall opposite to said guard-shoulder with a channel registering with the seal-seat extension, in combination with a seal adapted to be introduced through said inlet-slit and having a tongue or shank adapted to be guided by said channel into engagement with the seal-seat extension, and also having a head of greater width than the tongue or shank to occupy the main seal-seat, substantially as specified.

12. A lock having a fixed member provided with a shoulder cored to form a seal-seat extension disposed longitudinally of the member, and a movable member pivotally mounted upon the fixed member and provided with a longitudinal cavity forming a main seal-seat for registration with said seal-seat extension, and open at the end remote from the pivot for closure by said shoulder of the fixed member, said cavity being provided in one wall with a channel of reduced width registering with the seal-seat extension, and being reduced in depth as it recedes therefrom, and said cavity being provided at its extremity contiguous to the pivotal point of the movable member with an inlet-slit, equal in width with the cavity and arranged contiguous to the wall opposite to that in which said channel is formed, and being, furthermore, provided with an undercut guard-shoulder projecting toward the wall in which the channel is formed, in combination with a seal having a reduced tongue or shank adapted to lie in said channel and engage the seal-seat extension, and also provided with a head adapted to occupy the main seal-seat and lie under said guard-shoulder to prevent removal of the seal through said inlet-slit, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE W. LEWIS.

Witnesses:
ELLA J. CASSELL,
ROSALIE C. MARTIN.