(No Model.)

L. M. JUNKIN.

SEAL LOCK.

No. 275,496. Patented Apr. 10, 1883.

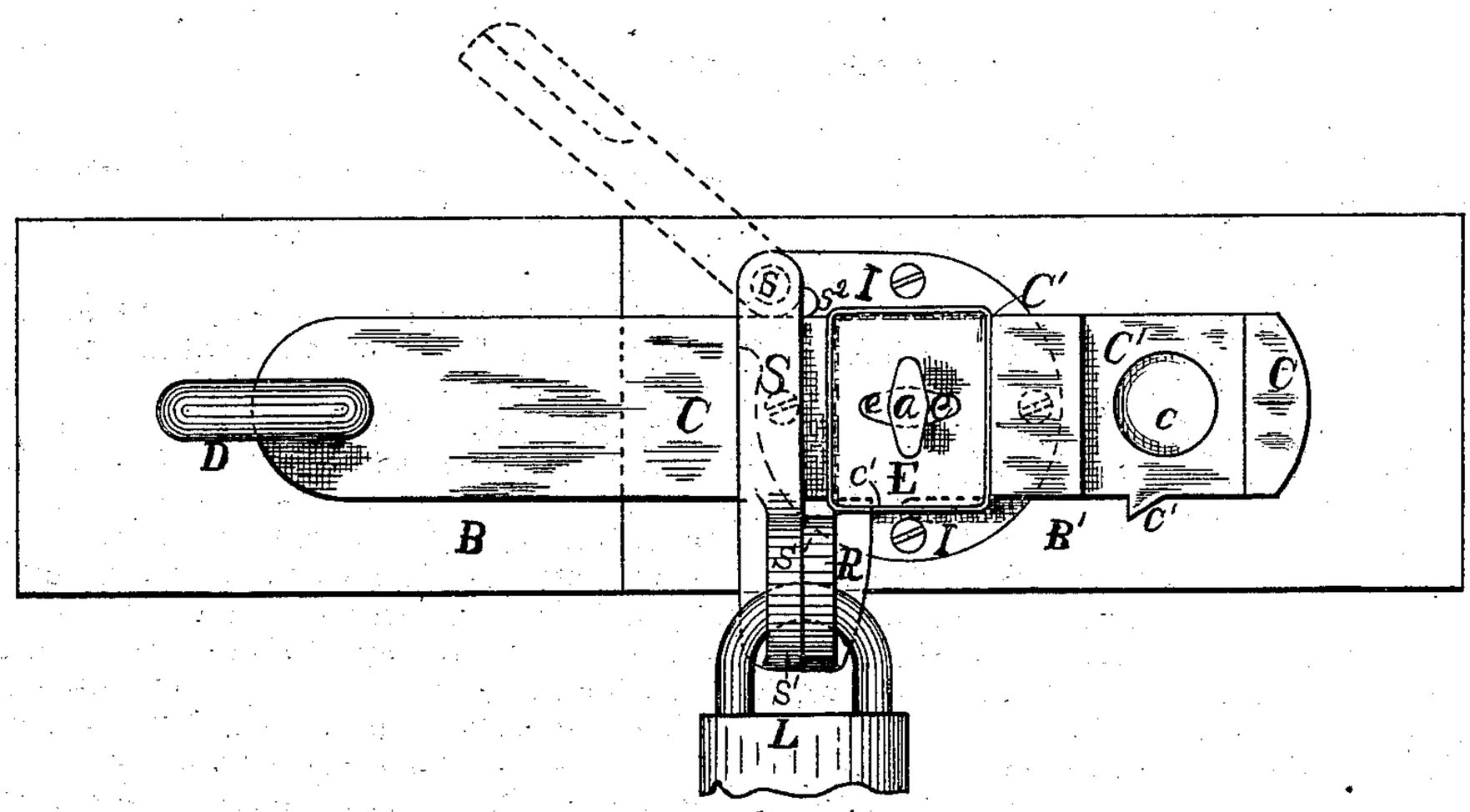

Fig. 1.

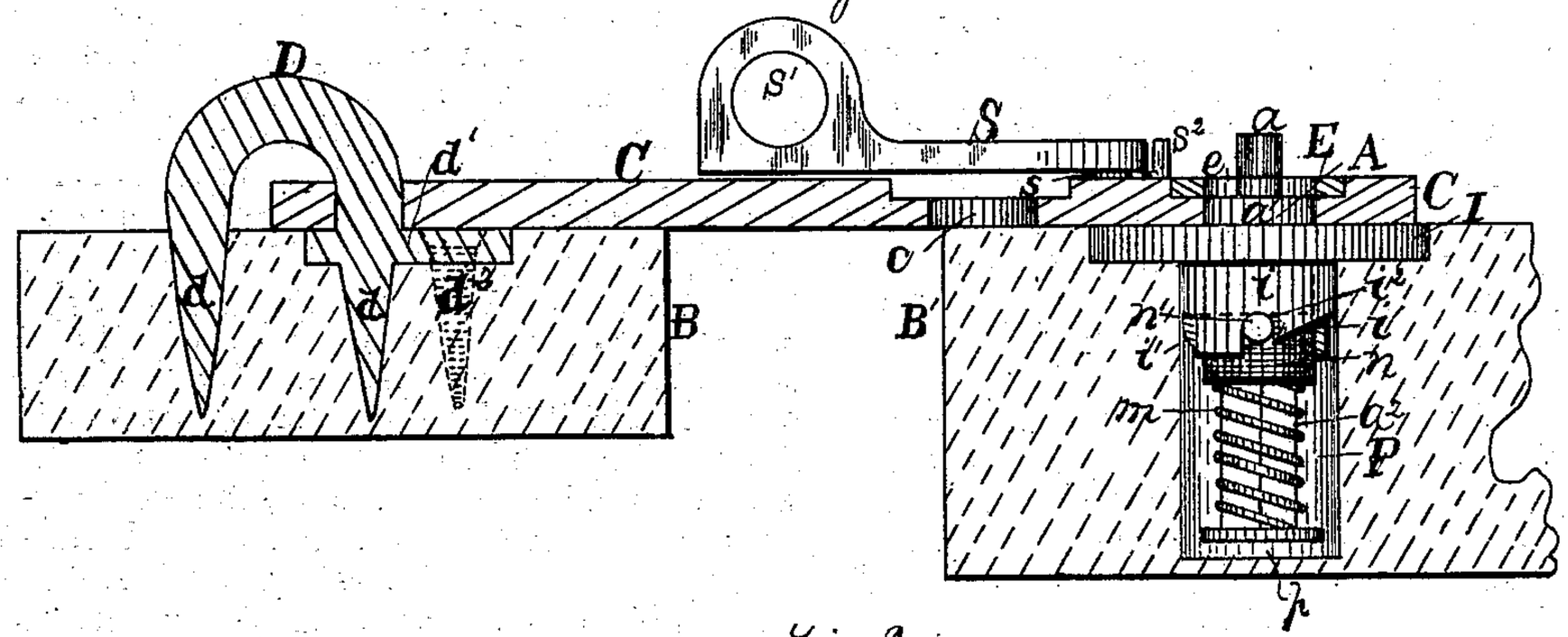

Fig. 2.

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UNITED STATES PATENT OFFICE.

LAWRENCE M. JUNKIN, OF LEET, ALLEGHENY COUNTY, PENNSYLVANIA.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 275,496, dated April 10, 1883.

Application filed October 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, LAWRENCE M. JUNKIN, a citizen of the United States, residing in Leet township, Pittsburg P. O, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Seal-Locks; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a plan view of my improved lock, and Fig. 2 is a longitudinal sectional view, parts of the lock being shown in elevation.

My invention relates to certain improvements in car-door locks, and more particularly that class known as "seal-locks;" and it consists in certain combinations, with the hasp and other parts of such a lock, of an auxiliary swinging hasp, a stationary loop or staple, to which the auxiliary hasp is secured by a key-lock, and devices for holding the several parts in proper relative positions, as hereinafter more fully described and claimed.

In locking car-doors it is desirable to make use of a key-lock in addition to or in combination with a seal-lock. The purpose of my invention is to secure this result by a combination of devices in the two classes of locks which shall co-operate in affording the desired security; and to this end I have illustrated my present invention applied in combination with the seal-lock for which Letters Patent of the United States were granted to me February 21, 1882, No. 253,870; but I do not wish to limit my invention to this specific application, as it or material and substantial parts thereof may be applied equally well and in substantially the same way to other forms of hasp-locks.

In the drawings, B represents a small section of a sliding car-door, and B′ of the door post or frame. A swinging hasp, C, is pivoted at one end, near the edge of the door, by a staple, D, having pointed ends *d*, which are driven into the door, and a plate, *d′*, formed on one of the staple-arms, which plate is fastened to the door by screws d^2, the heads of which are covered by the hasp when the latter is in position for locking. In the face of the hasp C, near its free end, are made recesses or seats C′, one or more in number, as presently described, which receive the frangible seal E and prevent it from turning. Other means may be employed for this purpose, however, as a lug on the hasp adapted to enter a perforation in the seal, or lugs on the seal which engage the edges of the hasp. Holes *c* are provided through the hasp, at or near the center of the recess C′, which receive or permit the entrance of the protruding end *a* of the locking-bolt A of the seal-lock. This seal and bolt and the mechanism for operating the bolt are substantially the same as shown and described in my prior patent, above referred to. On the outer end of the bolt is formed a T-head, *a*, adapted to pass through a slot, *e*, in the seal, and by turning the T at right angles to the slot to hold the seal on its seat. Below the neck of the T the bolt is cylindrical in form, as at *a′*, and is thus extended through the face-plate I and into a sleeve, *i*, which extends inward from the inner face of the plate. Below the sleeve the bolt is extended in an angular stem, a^2, to which is fitted a collar, *n*, so as to move longitudinally thereon, and to take rotary motion therewith. The inner edge of the sleeve *i* is formed into two opposite inclines, *i′*, and opposite sockets or seats, i^2, at the lower ends of such inclines. Pins *n′* are extended from opposite sides of the collar *n*, which play upon the inclines and drop into the seats i^2, under the pressure of coiled spring *m*. While the pins occupy these seats the bolt cannot be turned, and its head *a* is across or at right angles to the slot *e*. Consequently the seal cannnot be removed without breaking it, and the hasp C will be locked in place. In order to unlock it, the seal must be broken, after which the pins *n′* may be unseated by pushing down upon the bolt A, and the latter may then be turned to proper position to receive another seal.

In order to secure the hasp to the parts of the seal-lock by a key-lock, I secure a ring-loop, R, to the post B, by preference casting it solid with the face-plate I. The position of this loop is at one edge of the hasp when the latter is in locking position. Opposite the loop, at the other edge of the hasp, is pivoted a swinging auxiliary hasp, S, by stud or pin *s*. On the face of this hasp, at its free end, is formed a ring-loop, *s′*, which registers with the

loop R when the hasp S is turned down over the hasp C for locking, as represented in Fig. 1, and in this position the auxiliary hasp and its loop R may be secured together by any suitable key-lock, L. The hasp C will thus be held firmly against the face of post B′, and upon the end of bolt A, so that it cannot be lifted from the latter, even though the seal be broken, without first removing the auxiliary hasp S. To this end, however, I have limited the depth of mortise P, as at *p*, with reference to permitting only sufficient longitudinal movement of the bolt to unseat the pins *n′* and permit them to ride down the inclines *i*, but not sufficient to allow the head of the bolt to be pushed inward out of engagement with the hole *c*. This result may also be secured by means of a pin passed through the body *a′* of the locking-bolt, such pin having projecting ends which play in enlarged holes in sleeve *i*, the holes being of proper size to permit of the requisite rotary and longitudinal movement of the bolt. In order to guard further against breaking the lock effected by the hasp S, I have formed lugs *c′ c′* on the edge of hasp C, in proper position to engage the stem of loop R, and thus prevent endwise withdrawal of hasp C from under hasp S, even though the former should be disengaged from the bolt A by bending or otherwise.

I have shown the hasp C extended in length, with two seal-seats, C′, bolt-holes *c*, and locking-lugs *c′* thereon, one set being adapted to lock the door tight, as in Fig. 1, and the other to lock it somewhat ajar, as in Fig. 2, and thereby provide for ventilation of the car when desired, and at the same time lock the door both by seal and key locks. This feature of improvement I consider an important one. A lock may be effected in one position, however, with one bolt-hole in the hasp C, or if a wider range of adjustment be desired for ventilation more than two bolt-holes may be provided in the hasp. The two shown and described I consider sufficient for purposes of illustration.

In order to support the auxiliary hasp S when swung backward beyond the vertical in the direction indicated by dotted lines, Fig. 1, I set a stud, s^2, at a little distance from the pivot-post *s*, of proper height to arrest the further backward movement of the hasp and carry the same when not in use.

The double lock, formed as above described, is cheap and easy of construction, efficient in use, and well adapted to the purposes for which it is designed.

Instead of a key-lock, L, for connecting the hasp S to loop R, any desired form of seal-lock may be employed if preferred. This may be desirable in case of cars which are or may be used by companies using different kinds of seal-locks.

I claim herein as my invention—

1. A car-lock having, in combination, a recessed hasp, C, seal E, and rotary locking-bolt A, for effecting a seal-fastening of the car-door, with auxiliary hasp S, loop R, and key-lock L, for holding hasp C upon bolt A in case the seal be broken, thereby maintaining a lock-fastening of the door, substantially as set forth.

2. The lock-hasp C, having one or more lugs, *c′*, thereon, in combination with stationary loop R and auxiliary hasp S, substantially as set forth.

3. The combination of auxiliary hasp S, stationary loop R, pivoted hasp C, having one or more locking-lugs, *c′*, thereon, lock L, and bolt A, substantially as set forth.

4. The pivoted hasp C, having holes *c* therein at two or more different points in its length, in combination with bolt A, auxiliary hasp S, stationary loop R, and a key-lock for connecting the loop and auxiliary hasp, substantially as set forth.

5. In combination with a seal-lock having a locking-bolt and frangible seal, a pivoted hasp having two or more holes therein for receiving the locking-bolt at different points in its length, and recesses in the face of the hasp, or equivalent projections, substantially as described, for preventing the seal from turning on the bolt and hasp.

6. The combination of hasp C, auxiliary hasp S, loop R, endwise-movable locking-bolt A, and mechanism, substantially as described, for preventing the endwise movement of the bolt out of engagement with hasp C, when the latter is confined by hasp S, substantially as set forth.

In testimony whereof I have hereunto set my hand.

LAWRENCE M. JUNKIN.

Witnesses:
R. H. WHITTLESEY,
C. L. PARKER.