

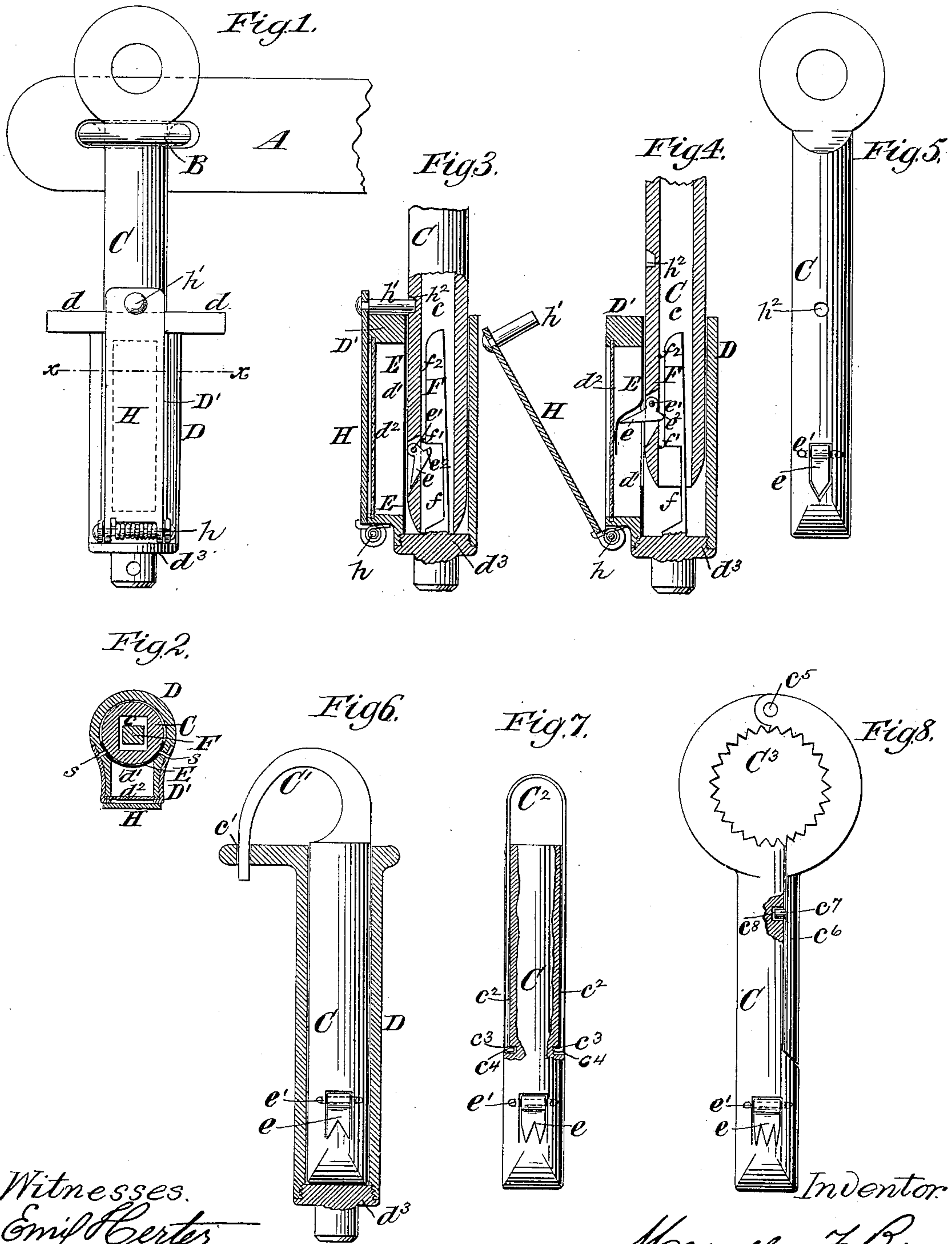
(Model.)

M. F. BERRY.

SEAL LOCK.

No. 365,231.

Patented June 21, 1887.



Witnesses.
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UNITED STATES PATENT OFFICE.

MARCELLUS F. BERRY, OF BROOKLYN, NEW YORK.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 365,231, dated June 21, 1887.

Application filed April 30, 1887. Serial No. 236,644. (Model.)

To all whom it may concern:

Be it known that I, MARCELLUS F. BERRY, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful
5 Improvement in Seal-Locks for Railway-Cars and other Structures or Packages, of which the following is a specification.

Although my invention is more particularly intended for the doors of freight-cars, it may
10 be employed in sealing any other structures or packages—such, for example, as the bags in which specie is transported by express companies.

The object of my invention is not to provide a fastening which will offer any great resistance to the forcible entry of the car or other receptacle to which it is applied, but which is
15 so constructed and used that in case the fastening is broken and the receptacle or structure surreptitiously entered the thief will be compelled to commit forgery if he attempts to replace the fastening or seal in its former condition.

My improved seal-lock is intended to be
25 used in connection with cards of paper or other material, which may be suitably printed or otherwise produced in such manner as to render their imitation difficult, and it may be signed with the name of any authorized person;
30 and in said seal-lock the principal component parts are a socket or sheath and a bolt sliding thereinto, the said parts being so constructed and provided with such appliances that the bolt cannot possibly be withdrawn
35 from the socket in order to enter the structure or receptacle without tearing the card. The socket has at one side a slot or recess, and the sliding bolt is provided with a tongue or tearing-dog, which may be pivoted therein, and
40 there is in the socket an abutment or detent, which does not interfere with the tearing dog or tongue when the bolt is inserted into the socket, but which, on any attempt to withdraw the bolt from the socket, will engage with and
45 throw the tongue or tearing-dog beyond the periphery of the bolt and through the card, and hold it protruded during the further withdrawal movement of the bolt. The tearing dog or tongue may, as above stated, be pivoted in the
50 bolt, and the abutment or detent may consist of a spring-finger projecting inward from the bottom of the socket and having a shoulder.

When the bolt is pushed into the socket, the tearing dog or tongue therein engages or bears upon the spring-finger in such a manner as to
55 deflect it and to permit the full insertion of the bolt into the socket; but when any attempt is made to withdraw the bolt, the tearing dog or tongue engages with the shoulder on the spring-finger, and the dog is thereby projected
60 beyond the periphery of the bolt and through the card, and remains in such a state of protrusion until it passes beyond the end of the spring-finger or abutment. The slot in the socket, through which the tearing dog or
65 tongue is projected, may be covered with glass, mica, or other transparent material, through which the card is visible, and such slot, whether covered by transparent material or not, may be shielded by a lid or cover having
70 a spring-actuated hinge at one end, and engaging with the bolt at the other end by means of a tooth on one engaging a hole or recess in the other.

The invention consists in novel features of
75 construction and combinations of parts, hereinabove briefly referred to and hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents an exterior view of a seal-lock embodying my invention, together with a hasp
80 secured upon a staple by such seal. Fig. 2 is a transverse section on about the plane of the dotted line *xx*, Fig. 1. Fig. 3 is a sectional view in a plane at right angles to the plane of
85 Fig. 1, showing the bolt as fully inserted into the socket and as in a state of rest therein. Fig. 4 is a sectional view in the same plane as Fig. 3, but showing the bolt as partly withdrawn from the socket. Fig. 5 represents the
90 bolt alone withdrawn from the socket. Fig. 6 is a longitudinal section of a seal-lock embodying all the features of my invention, but intended for application to a hasp or securing device in a slightly different manner. Fig. 7
95 represents a bolt of modified construction, intended to be inserted in the socket shown in Figs. 1, 3, and 4; and Fig. 8 represents a bolt, also intended to be inserted in the socket before described, and which is constructed to
100 grasp the neck or gathered portion of a bag for specie or other commodity.

Similar letters of reference designate corresponding parts in all the figures.

In Fig. 1 I have represented a hasp, A, and a staple or bolt-keeper, B, which may be applied to a car-door or other structure, and which constitutes the fastening secured by my seal-lock, which I will now describe.

The two principal component parts of the seal-lock consist of a socket, D, and a bolt, C, sliding into the socket. These may both be made of metal, and the socket may have ears or lateral projections d , with which the fingers may engage to withdraw the socket off from the bolt when the bolt is suspended from a staple or keeper, B, or from a securing device of any other character. The socket D has in one side a slot or groove, d' , extending longitudinally, and in this example of my invention the socket has upon one side an extension or housing, D' , covered at the face by glass, mica, or other transparent material, d^2 . The bore of the socket and the bolt are here represented as cylindric, and in the use of my device a card, E, of paper or any other suitable material is introduced between the bolt and the wall of the socket, wherein is formed the slot d' . The card may be bent into slightly concavo convex form and slipped into the socket, and the bolt C being then inserted, the card lies between the bolt and the wall of the socket, and that portion of the wall in which is the slot d' constitutes a seat for the card. This card may be embellished by printing or in any other suitable way, so as to make it difficult to reproduce by a person not having the original plates, and it may, as an additional means of security, have upon it the signature or a fac-simile of the signature of any authorized person. The bolt C has a central bore, c , open at one end, and in its wall is a tearing tongue or dog, e , which is shown as pivoted in the bolt at e' , so as to swing in a plane lengthwise of the bolt, and which has a shoulder, e^2 .

Within the hollow bore of the bolt is received a spring-finger, F, which, as here represented, projects from the closed lower end, d^3 , of the socket D in the direction of the axis of such socket. This spring-finger F is free at its opposite end, and therefore is capable of lateral deflection, and, to add to such capability, the portion f of the finger is thin or made of very slight thickness, to constitute a spring, and is joined by a shoulder, f' , to the upper portion of the finger f^2 , which is of greater thickness. I have represented the spring-finger F as polygonal in transverse section, it here being shown as square, and the bore c of the bolt C is of corresponding transverse section, and therefore insures the bolt being inserted in the socket in such position that the tongue or dog e will be opposite the slot d' in the socket.

When the bolt C is inserted into the socket D, the tongue or tearing-dog e lies shielded within the periphery of the bolt, as is shown in Fig. 3, and the flat and thickened portion f^2 of the spring-finger F holds it shielded within the periphery of the bolt until the shoulder e^2

of the tearing-dog e passes the shoulder f' of the spring-finger. As shown in Fig. 3, the parts are in their position of rest after the bolt has been inserted and before any attempt is made to withdraw it.

On the first attempt to withdraw the bolt from the socket, or to slip off the socket from the bolt, the shoulder e^2 on the tearing-dog e comes against the shoulder f' of the spring-finger F, and by such action the tearing-dog e is thrown outward or projected beyond the periphery of the bolt through the card E and the slot d' into the position shown in Fig. 4, and by the thickened portion f^2 of the spring-finger F the dog is held in such protruding position until it has passed the end of the spring-finger and come to the end of the slot. By such action of the dog a broad shaving or strip is torn out of the card and it becomes impossible to replace it with accuracy in the socket and replace the bolt without the fact that the seal has been opened being at once detected; and if the thief desires to cover his operations, he must make and forge, as nearly as possible, a fac-simile of the card and place such card and replace the bolt in the socket. Any such forgery of a signature would be at once detected and would render the robber liable to the penalty for that crime. It will therefore be seen that the spring-finger F constitutes an abutment or detent within the socket, and by which, on any attempt to withdraw the bolt therefrom, the tongue or tearing-dog will be thrown outward through the card and beyond the periphery of the bolt and there held during a portion of the withdrawing movement of the bolt.

As shown in Fig. 5, the free end of the tearing-dog or tongue e may be pointed or sharpened, so as to readily penetrate the card E when forced against the latter.

In order to still further protect the mica or glass d^2 , or to protect the slot d' in case such mica or glass be not used, I have represented a lid or cover, H, which at one end is connected with the socket by a spring-actuated hinge, h , and at the other end is engaged with the bolt by a tooth on one entering a recess or hole in the other. In this example of my invention a tooth, h' , on the lid or cover H enters a recess, h^2 , in the bolt, and thereby prevents the socket D from accidentally dropping off the bolt while the car or other structure or receptacle to which the seal is applied is in motion or moving.

The construction shown in Fig. 6 does not differ from that above described, save that the bolt C at its upper end is formed with a hook, C' , which may be inserted through the staple or keeper B, and which, when the bolt is slid into the socket D, enters a hole or keeper, c' , formed in the projection from the socket.

In Fig. 7 I have represented a bolt which is intended to be used with the socket above described, and shown in Figs. 1, 3, and 4, and which has connected with it a wire bail, C^2 .

The bolt, as shown, is provided with grooves c^2 at opposite sides and with deeper recesses or shoulders c^3 at the lower ends of the grooves, and the ends of the bail may be turned inward, as shown at c^4 , so as to enter the recesses c^3 , while the two arms or members of the bail lie in the grooves c^2 . One end of the bail may be fixed in the recess c^3 . In applying this seal-lock the wire bail, being detached from the bolt, may be passed through a hasp or other device, and then its two arms may be engaged with the bolt, in the manner shown in Fig. 7, and the bolt slid into the socket. The bolt shown in Fig. 8, which is intended to grasp or embrace the necks or gathered portions of bags, may have a ring-like head, C^3 , formed with teeth or serrations on its inner periphery and constructed of two sections hinged together at c^5 . The section, which is formed separate from the bolt proper, may have an arm, c^6 , which is received in a depression formed in one side of the bolt, and which completes the circular contour of the bolt. When the bolt is to be applied to the neck of a bag, the arm or member c^6 is swung away from the bolt proper, the bag is grasped by the ring-like portion C^3 , and the arm c^6 being returned to its former position, close against the side of the bolt, the latter is thrown into the socket. In order to prevent any one from removing the pivot c^5 and then drawing out the arm c^6 without removing the bolt proper from the socket, I have represented on the arm c^6 a pin, c^7 , entering a recess, c^8 , in the side of the bolt, and when the bolt is inserted in the socket the arm c^6 and the ring-section formed therewith is prevented from being slid along the bolt to enable the device to be removed from the neck of the bag without withdrawing the bolt proper from the socket.

In order to prevent the card E from being drawn out of the socket D with the bolt C, I have represented the socket as provided with pins s , (best shown in Fig. 2,) the points of which engage the card.

It will be observed that the spring-finger F constitutes the abutment or detent to which I have referred.

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

1. The combination, in a seal, of a socket for receiving within it a card and having in the seat for the card a slot or recess, a bolt fitting the socket and for insertion into the same, so that the card will lie between the bolt and socket, which bolt has a tongue or tearing-dog, and

an abutment or detent within the socket, whereby, on any attempt to withdraw the bolt therefrom, the tongue or tearing-dog will be thrown outward through the card and beyond the periphery of the bolt and there held during a portion of the withdrawal movement of said bolt, substantially as herein described.

2. The combination, with a socket for receiving within it a card, and having in the seat for said card a longitudinal slot and having a transparent cover over such slot, of a bolt fitting the socket, and having a tongue or tearing-dog which is normally sheathed within its periphery, and an abutment or detent within the socket, whereby, on any attempt to withdraw the bolt, the tongue or dog will be thrown outward beyond the periphery of the bolt and through the paper and be there held during a portion of the withdrawal movement, substantially as herein described.

3. The combination, with the bolt-socket D, having in one side a slot or recess, d' , and having a shouldered spring-finger extending inward from its lower end and within its bore, of the bolt C, having a pivoted tearing dog or tongue, e , substantially as and for the purpose herein described.

4. The combination, with the bolt-socket D, having a circular bore and a slot or groove, d' , in one side thereof, and having projecting inward from its end the spring-finger F, having the shoulder f' , and of polygonal transverse section, of the bolt C, having an internal cavity of polygonal form to receive the finger, and provided with the tearing dog or tongue e , substantially as and for the purpose herein described.

5. The combination, in a seal, of a socket for receiving within it a card, and having in the seat for the card a longitudinal slot, a bolt fitting the socket and for insertion into the same, so that the card will be between the bolt and socket, which bolt has a tearing dog or tongue, an abutment or detent within the socket, whereby, on any attempt to withdraw the bolt therefrom, the tearing dog or tongue will be thrown outward through the card, and a spring-actuated lid or cover for the slot in the socket, engaging the bolt by a tooth on the cover entering a hole or recess in the bolt, substantially as herein described.

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Witnesses:

C. HALL,
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