

R. P. REID.

SEAL LOCK.

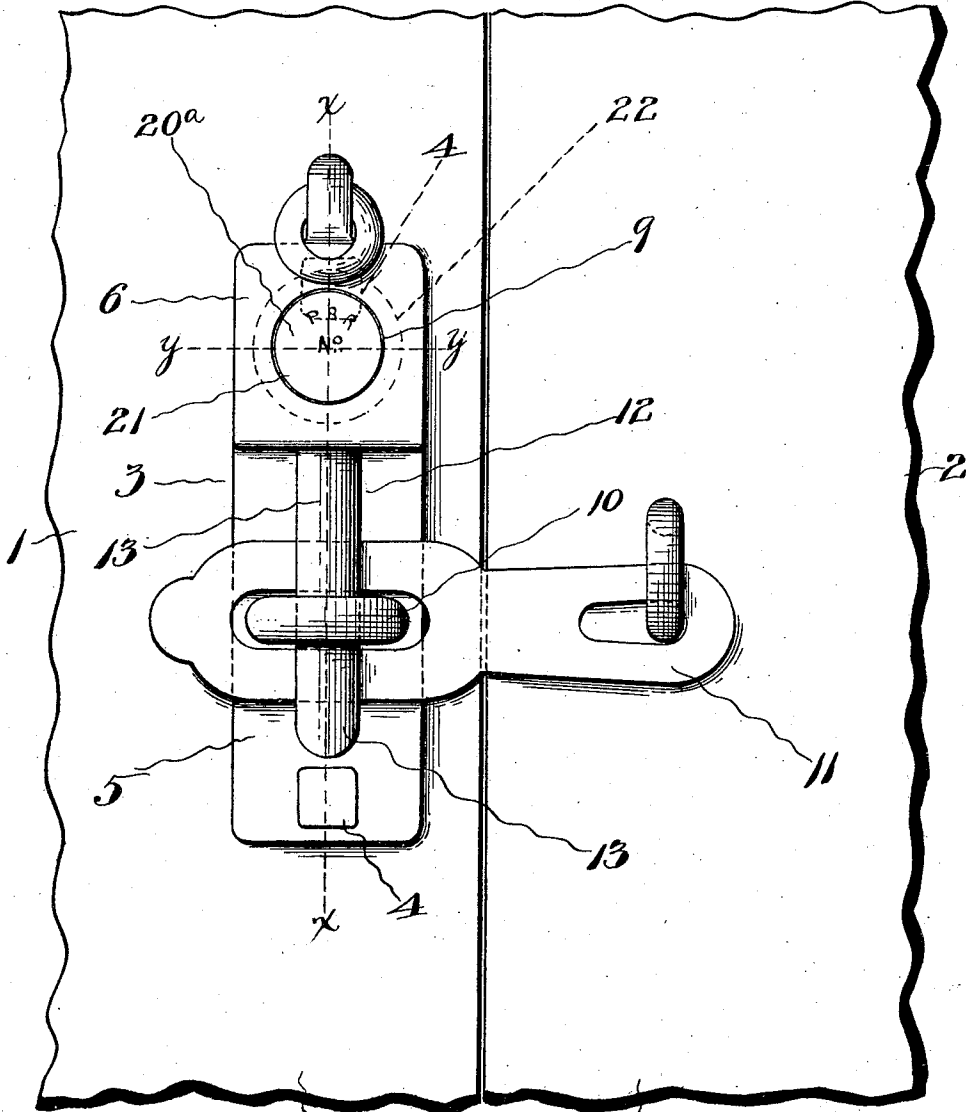
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966,122.

Patented Aug. 2, 1910.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses

W. Blackwood.
O. E. Jones Jr.

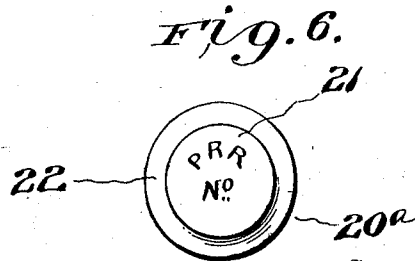
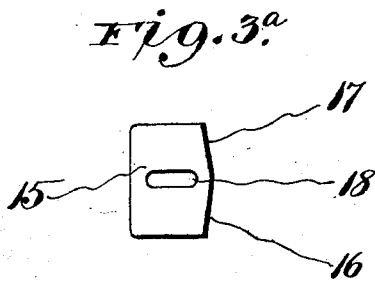
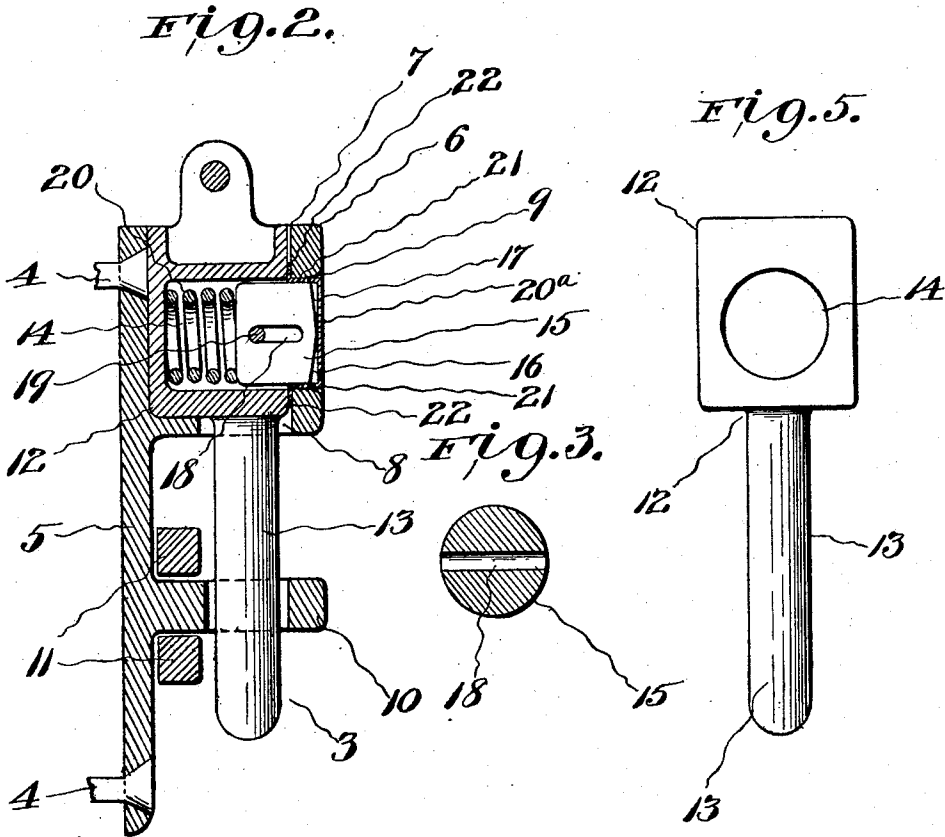
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3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

Fig. 7.

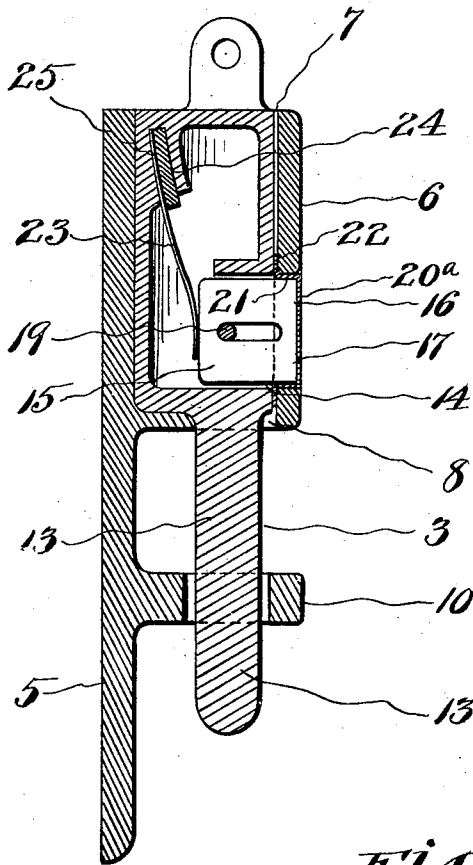


Fig. 8.

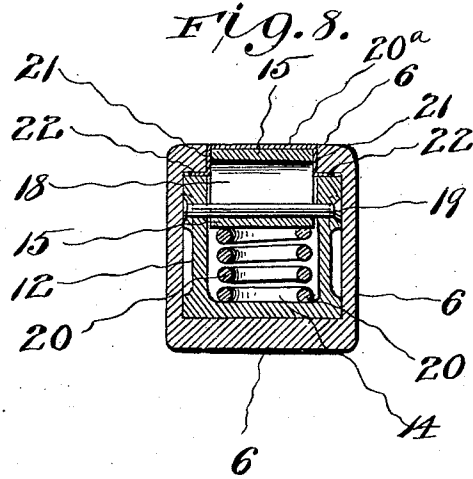


Fig. 4.

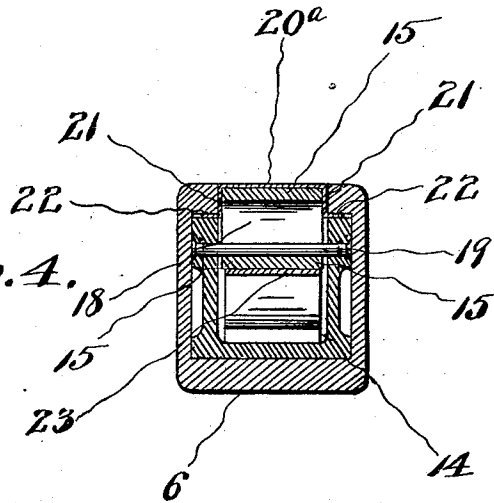
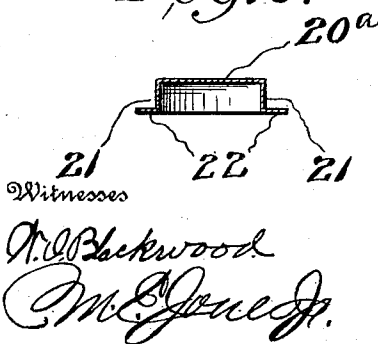


Fig. 6a.



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UNITED STATES PATENT OFFICE.

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SEAL-LOCK.

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Specification of Letters Patent.

Patented Aug. 2, 1910.

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To all whom it may concern:

Be it known that I, ROBERT P. REID, residing at Watervliet, in the county of Albany, State of New York, a citizen of the United States, 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 pertains to make and use the same.

My invention relates to improvements in seal-locks more especially for use in sealing railroad car doors but which may be used equally as well for sealing mail bags, gas and electric meters, packages &c.

The object of the invention is to provide a seal-lock which will lock the door of a car so that it cannot be opened without breaking or mutilating the seal, but after the seal is broken can be easily unlocked.

It also has for its object to provide a seal-lock which is simple, durable, strong and inexpensive in construction and easily manipulated.

The invention consists in the several features and combination of features as herein-after more fully described and claimed.

Referring to the drawings:—Figure 1, is a front view in elevation of the seal-lock attached to the door frame of a car. Fig. 2, a central longitudinal section on the line $x-x$ of Fig. 1. Fig. 3, a detail view of the plunger. Fig. 3^a a side view of the plunger. Fig. 4 a cross-section on the line $y-y$ of Fig. 1. Fig. 5, a detail view of the locking bolt and its chamber. Fig. 6, a plan view of the seal. Fig. 6^a a central sectional view of the seal. Fig. 7, a central longitudinal section of a modified form of seal-lock. Fig. 8, a cross-section of the modified form of seal-lock shown in Fig. 7.

In the drawings in which like reference characters denote like parts throughout the several views, 1 represents a portion of the door frame of a car and 2 a portion of the door thereof.

3 is the seal-lock which is bolted to the door frame 1 of the car by means of bolts 4. The seal-lock comprises a base-plate 5 with an integral casing 6 at its upper end having an opening 7 through the top and an opening 8 through the bottom, the opening 8 being considerably smaller than the opening

7, and an opening 9 through the front. A staple 10 is formed integral with the base-plate 5 and 11 is a hasp one end of which is attached, in any desired manner, to the door 2 and the other end adapted to pass over the staple 10. The locking member 12 of the seal-lock is mounted in the casing 6 and rests on the bottom thereof, said locking member comprising a slidable bolt 13 provided at one end with a chamber 14 in which is mounted a horizontally slidable plunger 15 provided with inclined surfaces 16 and 17 on its front end for the purpose of assisting in the insertion and withdrawal of the same into and from the casing, said plunger also having an elongated slot 18 therethrough receiving a pin 19 the ends of which are secured in the side wall of chamber 14. The pin 19 is designed to prevent the plunger from being forced too far out of the chamber 14. A spiral spring 20 is mounted in the chamber 14 and bears against the rear end of the plunger 15 and keeps it normally in its outward position beyond the front wall of the chamber 14 and in the opening 9 of the casing.

A seal 20^a which may be made of paper, celluloid, thin metal or any desired material, is provided which has a hollow body portion 21 and an annular flange 22 which surrounds the same. The body portion 21 of the seal is designed to be inserted in the opening 9 of the casing 6 and its flange 22 is clamped securely between the outer surface of the chamber 14 and the casing 6, and the plunger 15 extends into and engages the hollow body portion 21 and keeps its sides clamped against the edge of the said opening 9.

In the modified form of seal-lock shown in Figs. 7 and 8 a flat leaf spring 23 is used to keep the plunger in its outward position instead of the spiral spring 20, said spring 23 being secured in a slot 24 in the chamber 14 by means of a wedge 25.

In use the seal 20^a is placed in the opening 9 of the casing from the inside, the plunger 15 is pushed inward against the pressure of the spring 20, the bolt 13 is then inserted and slid downward into the casing 6, the bolt passes through the opening 8 and the staple 10 and the beveled surface 16 of the plunger contacts and slides on the inner surface of the casing until the plunger is in

alinement with the opening 9 of the casing when the spring 20 causes the plunger to move outward and into the hollow body portion 21 of the seal and clamps said seal against the edge of said opening 9. It will be seen that the bolt cannot be withdrawn from the casing without depressing the plunger and that the plunger cannot be depressed without breaking or mutilating the seal and consequently the lock cannot be opened without showing that it has been tampered with.

When the person having the proper authority desires to unlock the lock all he has to do is to break the seal and depress the plunger and then slide the bolt and chamber upward when the beveled portion 17 of the plunger will slide on the inner surface of the casing until it is beyond the same when it will assume its normal outward position again.

I do not desire to be understood as limiting myself to the specific details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to the various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variations and modifications as properly fall within the scope of my invention and the terms of the following claims.

What I claim is:—

1. In a seal-lock, a casing having an opening, a hollow seal in said opening, a bolt in said casing having a plunger and means adapted to project said plunger into the hollow portion of the seal and hold it in the opening in the casing, substantially as described.

2. In a seal-lock, a casing having an opening, a bolt slidable in said casing and having a chamber, a plunger mounted in said chamber and a seal held in the opening of the casing by said plunger, said seal being provided with a flange which is clamped between the casing and the chamber, substantially as described.

3. In a seal-lock, a casing having an opening, a hollow seal in said opening, a slidable bolt having a chamber and a spring controlled plunger mounted in said chamber

adapted to project into the hollow portion of said seal and hold it in the opening in the casing, substantially as described.

4. In a seal-lock, a casing having an opening, a seal in said opening, a slidable bolt in said casing having a spring plunger which projects into said seal and means for limiting the outward movement of said plunger, substantially as described.

5. In a seal-lock, a casing having an opening, a seal in said opening, a slidable bolt having a spring plunger projecting into said seal and clamping the sides of the seal against the side of said opening, substantially as described.

6. In a seal-lock, a casing having an opening, a seal in said opening, a slidable bolt having a chamber in alinement with said opening, a spring plunger in said chamber projecting into the seal and having a slot therethrough and a pin engaging said slot, substantially as described.

7. In a seal-lock, a casing having openings in its top, bottom and front walls, a seal in said front opening having a flange extending beyond the opening, a slidable bolt passing through said top and bottom openings, said bolt being provided with a spring plunger projecting into the seal and means for limiting the outward movement of the plunger, substantially as described.

8. In a seal-lock, a casing having an opening, a seal in said opening, a slidable bolt having a chamber mounted in said casing and a spring plunger in said chamber projecting into said seal and having one of its ends beveled, substantially as described.

9. In a seal-lock, a stationary member provided with a hollow seal and a slidable locking member having spring controlled means projecting into the hollow portion of said seal, substantially as described.

10. In a seal-lock, a stationary member, a slidable member therein, a hollow seal held between said stationary and slidable members and spring controlled means in said slidable member projecting into the hollow portion of said seal, substantially as described.

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

ROBERT P. REID.

Witnesses:

L. VAN AUKEN,
RICHARD LIEBAU.