

C. D. HALL, SR.
FREIGHT CAR SEAL.
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1,007,690.

Patented Nov. 7, 1911.

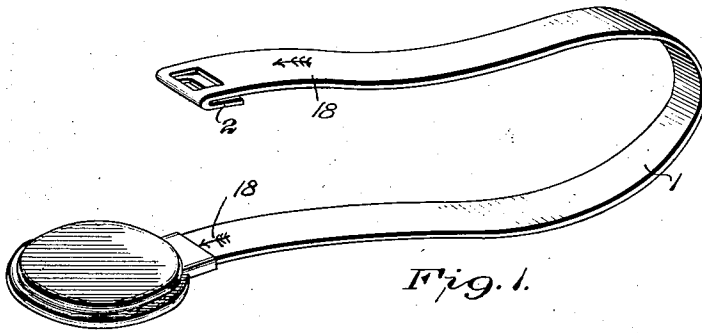


Fig. 1.

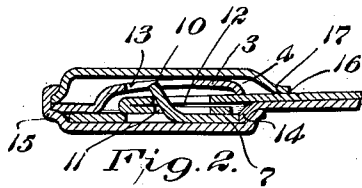


Fig. 2.

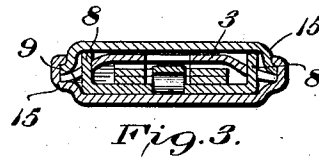


Fig. 3.

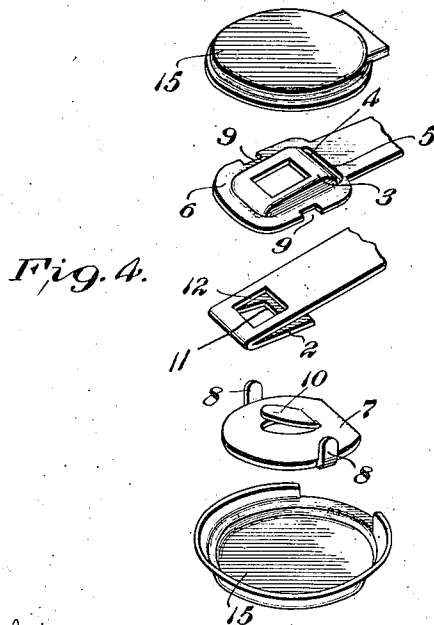


Fig. 4.

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UNITED STATES PATENT OFFICE.

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FREIGHT-CAR SEAL.

1,007,690.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CARY D. HALL, Sr., a citizen of the United States of America, residing at the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Freight-Car Seals, of which the following is a specification.

This invention relates to seals, and particularly the seals of the type most commonly used by railroad companies on freight car doors. The purpose of such seals is to indicate clearly and with certainty whether or not the car has been opened since the seal was applied. To be effective, such a seal must be so constructed that when once closed or applied, it cannot be opened or removed without so defacing it that the fact that it has been tampered with will be apparent on even a casual inspection.

To produce a new and improved mechanically locking shackle seal, which cannot be picked without making the fact of such picking apparent, is the object of my invention.

In its preferred form, the seal consists of a shackle, one end of which is provided with a hook, the other end being recessed and slotted so that the hook can pass through the slot into the recess; a keeper having a tongue extending into the recess; the point or bent-over portion of the hook being apertured to receive the tongue and disposed toward the keeper. This form of my device is illustrated in the accompanying drawing.

Figure 1 is a perspective view of the seal, the hooked end of the shackle being free. Fig. 2 is a vertical, longitudinal cross-section through the seal, the shackle being broken off. Fig. 3 is a vertical cross-section taken transversely of the cap. Fig. 4 shows the various elements of my device, separated from each other, but arranged in the order in which they occur in the assembled structure.

The seal consists of a shackle "1," preferably formed of a flexible metal band, one end of which has a hook "2" which may be formed by folding the metal band back upon itself. The opposite extremity of the band is re-cessed or offset at "3," and in the shoulder "4" of the offset is a transverse slot or aperture "5" to admit the hooked end "2" of the shackle, so that the hook may be passed through the slot into the recess. The recess, as shown, is closed by means of a keeper plate "7" which, in this embodi-

ment of my invention, is attached to the butt-end of the shackle by means of ears "8" on the plate which engage slots "9" in the shackle. The keeper plate "7" is provided with a central resilient tongue "10" which may be a portion of the plate punched up as shown. This tongue projects into the recess "3," and when the seal is locked or in operation, passes through apertures "11" and "12" provided for its reception in the hooked end of the band. Preferably in forming the hook, the band is bent toward the keeper plate so that the barb or bent portion of the hook rests on the plate. In the embodiment of my invention shown, the recessed portion of the butt-end of the shackle is apertured at "13" to permit free action of the tongue. To close the aperture between the butt-end of the shackle and the keeper plate, the shackle is provided with a depending lip "14" formed by depressing the edge of the slot "5" on the side remote from the offset.

For the purpose of protecting the device from the weather and to render tampering with it additionally difficult, the butt-end "6" of the shackle with the cooperating keeper plate "7" are inclosed within a cap "15" which is so constructed as to provide an aperture "16" adjacent the butt-end of the shackle, for the admission of the hooked end "2" of the same. This aperture is protected by a flat protruding lip "17." The shackle is marked with arrows "18," the points of which register with the edges of the cap when the seal is closed.

The operation of my device will be apparent from the description. When the hooked end is inserted into the cap, it passes through the aperture "5" in the butt-end of the shackle and occupies the recess "3." As the hooked end is advanced, it first depresses the tongue "10" until the latter is freed by registration with the apertures "11" and "12," when it springs up and passes through the hook. When once so placed, the withdrawal of the hooked end of the shackle, without mutilation of the seal, is impossible. The lip "14" protects the aperture between the butt-end of the shackle and the keeper plate, so that no instrument can be thrust therein. Any instrument which is thrust between the butt-end and the hooked end of the shackle, will enter the hook proper and be entirely ineffective. Any instrument thrust into the cap on top

of the shackle, will be equally ineffective, as it will merely serve to clench the tongue "10" and make the closure more secure. If the shackle be cut off and the severed end thrust into the cap, the arrows "18" will be concealed, and the fact that the seal has been tampered with will be apparent.

I have thus described, in minute detail, a single embodiment of my invention in order that its construction and operation may be clearly understood, however, the specific terms herein are used in their descriptive rather than in their limiting sense, and the scope of the invention is defined in the accompanying claims.

I claim—

1. A freight car seal consisting of a flexible band having a hook at one end, the other end being slotted to receive the hook, a keeper affixed to the said slotted end and having a tongue projecting across and beyond the slot, the hook being slotted to receive the tongue and suitable means for preventing access to the locking portions of the seal.

2. A freight car seal consisting of a flexible band having a hook at one end, the other end being slotted to receive the hook, a tongue affixed to the slotted end and projecting across the slot, the hook having two slots, one in the shank and the other in the point portion of the hook through both of which the tongue passes.

3. A freight car seal consisting of a flexible band, having at one end an off-set and at the other a hook, the shoulder of the off-set being apertured to receive the hook, the hook being slotted and the offset end, carrying locking means, engaging the slot.

4. A freight car seal consisting of a shackle, one end of which is provided with a hook, the other end being recessed and the shoulder, which forms one side of the recess, being slotted to receive the hook, a

keeper secured to the shackle over the recess and provided with a resilient tongue, the hook being apertured to receive the tongue.

5. A freight car seal consisting of a shackle, one end of which is provided with a hook, the other end being recessed and slotted so that the hook can pass through the slot into the recess, a tongue extending into the recess, the hook having registering apertures to receive the tongue, so that the tongue passes through the shank and point portion of the hook.

6. A freight car seal consisting of a shackle, one end of which is provided with a hook, the other end being recessed and slotted so the hook can pass through the slot into the recess, a keeper having a tongue extending into the recess, the point portion of the hook being apertured to receive the tongue, the recessed end having a flange adjacent the slot to close the space between the hook and keeper.

7. A freight car seal consisting of a shackle, one end of which is provided with a hook, the other end being recessed and slotted so the hook can pass through the slot into the recess, a keeper having a tongue extending into the recess, the point portion of the hook being apertured to receive the tongue, a flange on the recessed portion adjacent the slot to close the space between the hook and keeper, and a cap inclosing the recessed end and apertured to admit the hook, the cap having a lip adjacent the aperture and parallel to the portion of the shackle adjacent the cap.

Signed by me at city of Baltimore, State of Maryland, this 5th day of January 1911.

CARY D. HALL, SR.

Witnesses:

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