C. J. DRESSER.

CAR DOOR SEAL.

APPLICATION FILED MAY 8, 1917.

1,311,500. Patented July 29, 1919.

Fig. 1.

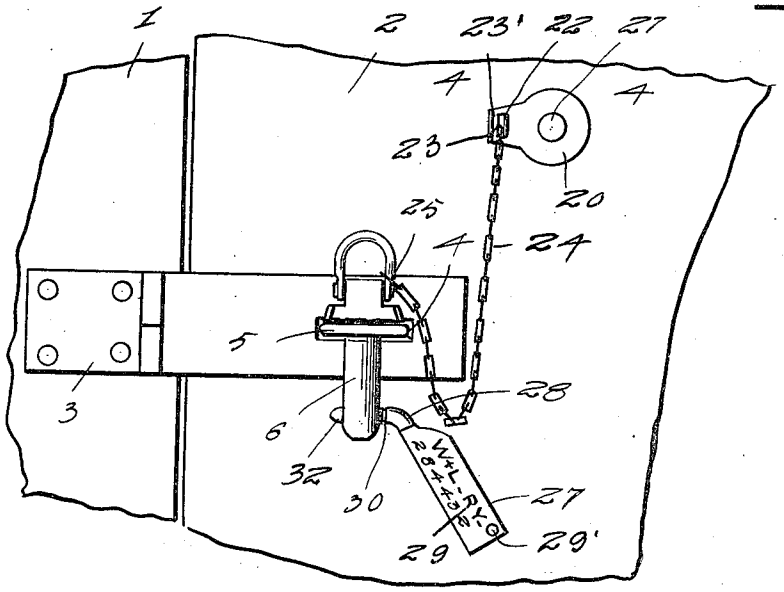


Fig. 2.

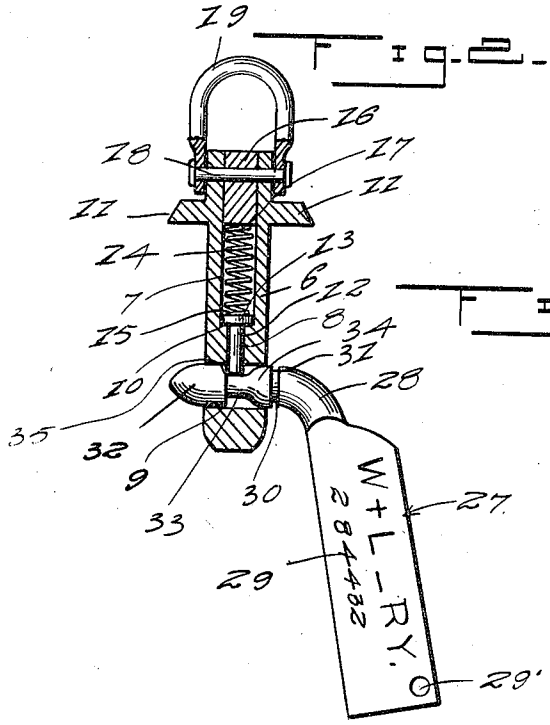


Fig. 3.

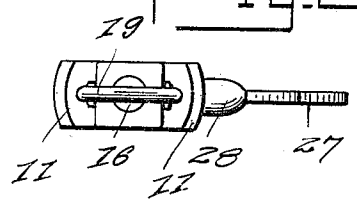
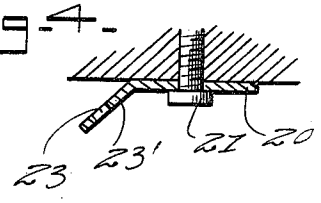


Fig. 4.



Witnesses

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CAR-DOOR SEAL.

1,311,500. Specification of Letters Patent. Patented July 29, 1919.

Application filed May 8, 1917. Serial No. 167,291.

To all whom it may concern:

Be it known that I, CHARLES J. DRESSER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Car-Door Seals; 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 appertains to make and use the same.

This invention relates to improvements in car door seals.

The object of the invention is to provide a car seal which is especially adapted to be arranged through the staple after the hasp has been placed thereon to normally retain the door in closed position and against being opened by unauthorized persons.

A further object of this invention is to provide a car door seal, which cannot when once fastened on the car be twisted therefrom, thus obviating the opening of the car by a person other than the persons having permission to enter the car and suitable tools to remove the seal therefrom.

A still further object of this invention is to provide a retaining plate, which is riveted to the car door, a barrel adapted to be arranged through the staple of the car door after the hasp has been placed thereover, a spring pressed bolt located in the barrel, and a seal carrying a key, which is adapted to be locked in the barrel by the spring pressed bolt and the key cannot be removed from the barrel by unauthorized persons.

A still further object of this invention is to provide a car seal of this character, which will be simple, practical and comparatively inexpensive in construction, and one that can be manufactured and sold at a low cost.

With these and other objects in view, the invention consists in the novel combination and arrangement of parts hereinafter more fully described and set forth in the claims hereto appended.

In the drawing:

Figure 1 is a fragmentary front elevation of the portion of a car illustrating my improved car seal applied thereto,

Fig. 2 is a vertical sectional view through the barrel to illustrate the manner in which the seal and key are held by the barrel,

Fig. 3 is a top plan view of the same,

Fig. 4 is a fragmentary view of a portion of the car illustrating the manner in which the retaining plate is secured thereto.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

Referring to the drawing, the numeral 1 designates a fragmentary portion of a car, while 2 indicates the sliding door therefor. Secured to the car adjacent the opening is the hinged hasp 3, which is provided adjacent its free end with a slot 4, which is adapted to receive the staple 5, which is secured to the door 2, as clearly shown in Fig. 1, and to which my improved invention is adapted to be applied.

My improved car door seal comprises in its construction, a cylindrical barrel 6, which has the inwardly extending slot 7, which has its lower end reduced as at 8 and which is intersected by the transversely extending opening 9, which is arranged adjacent the lower end of the barrel 6 as clearly shown in Fig. 2. The upper end of the barrel is fully open as shown.

The reduced portion of the slot 7 forms a horizontal shoulder in cross section and designated 10, the purpose of which will be hereinafter more fully described.

A stop flange 11 is formed integrally with the barrel adjacent the upper edge thereof and extend laterally therefrom in opposite directions; the flange is adapted to engage the upper side of the staple after the hasp has been arranged on the staple to limit the movement of the barrel through the staple.

A locking pin 12 is slidably arranged in the slot 7 and extends through the slot 8 and is provided on its inner end with an enlarged circular head 13, which is adapted to engage the horizontal shoulder 10 to limit the outward movement of the pin 12 or prevent this pin from being entirely withdrawn from the lower end of the barrel 6.

A coiled spring 14 is arranged in the slot 7 of the barrel 6 and one end engages the head 13 of the pin 12 as at 15 and its opposite end abuts the inner surface of the plug 16 as shown at 17, which plug is removably arranged in the open end of the barrel 6, thus providing a suitable chamber between the horizontal shoulder and the inner end of the plug in which may be arranged a suitable lubricant oil to keep the bolt from rusting and thereby obviate the winding of the bolt within the reduced slot 8.

A transverse bolt 18 is arranged through

the upper end of the barrel 6 and stop plug 16 to secure the plug in the barrel 6, the ends of the bolt extend beyond the walls of the barrel and have secured thereto, U-shaped yoke 19, which has its arms pivotally secured to the ends of the pin 16 to permit the same to be supported to the car door.

A retaining plate 20 is riveted or otherwise secured as at 21 to the car door and is provided with an extension 22, which is provided with a slot 23, in which is connected one end of the flexible chain 24, while its opposite end is secured to the yoke 19 as at 25, thus preventing the barrel from being lost or otherwise taken from the car door, when not in use.

It is to be understood that the spring 14 normally urges the bolt 12 out through the slot 8 and into the opening 9 adjacent the lower end of the barrel 6, the purpose of which will appear as the description proceeds.

A seal designated in its entirety by the numeral 27 comprises a curved shank 28, which is circular in cross section and has formed integrally with one end, a flat substantially rectangular seal 29 on which is adapted to be printed or otherwise stamped thereon, the name of the road or corporation using this type of car seal.

The opposite end of the shank 28 is reduced as at 30 to form a shoulder 31, a locking head 32 is formed integrally with the reduced portion 30 of the shank and this reduced portion is provided so that the head may be severed from the shank to permit the key to be forced from the barrel 6 and the barrel removed from the staple 5 to permit the car door to be opened.

The head 32 is provided with an annular recess 33, which has the convex outer surface 34 and the connection of the annular recess 33 with the head 32 forms a shoulder 35, which is adapted to be engaged by the outer end of the pin 12 when the key is inserted in the transverse opening 9 in the barrel 6.

In providing the annular recess 33 for the reception of the pin 12, the intentional false insertion of the bolt within the opening 9 is prevented.

The plate 29 is provided near its end with an opening 29′, through which may be inserted a wire or other suitable material to facilitate the carrying of a plurality of the seals or keys.

In operation, the hasp 3 is arranged over the staple 5, the barrel 6 is dropped through the staple and is limited in its movement by the engagement of the flanges 11 with the staple, the head 32 is then arranged through the transverse opening 9 in the barrel 6 until the shoulder 35 is beyond the pin 12, the pin engaging the shoulder 35 and the convex surface 34, thus sealed in position and preventing opening of the door by unauthorized persons.

When it is desired to move the seal from a car door, it is only necessary to take a suitable tool and sever the shank from the head at the reduced portion 30 and take an instrument and drive the head 32 out of the opening 9 and by the pin riding over the convex surface, it will be forced back into the opening 8 and slot 7 and permit the head to be entirely removed and a new key substituted when it is desired to lock another car.

What is claimed is:

1. A car door seal including a barrel having longitudinal and transverse openings, a pin arranged in said longitudinal opening, spring means for pressing the pin forwardly and a cylindrical locking bolt having a recess adapted to receive said pin upon the insertion of the bolt in said transverse opening, the recess in said bolt being annular whereby the false insertion of the bolt in the transverse opening is prevented.

2. A car door seal including a barrel having longitudinal and transverse communicating openings, a pin arranged in said longitudinal opening, a spring for pressing the pin forwardly, a plug permanently arranged in said longitudinal opening for retaining the spring and pin in position, and a cylindrical locking bolt having an annular recess for receiving the locking pin, the rear end portion of said locking bolt being curved longitudinally for preventing the passage of the same through the transverse opening.

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

CHARLES J. DRESSER.

Witnesses:

OSCAR REDDING,

WALTER E. STILES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."