

J. HORNAGY.
CAR DOOR FASTENER.
APPLICATION FILED NOV. 10, 1915.

1,171,047.

Patented Feb. 8, 1916.
2 SHEETS—SHEET 1.

Fig. 1.

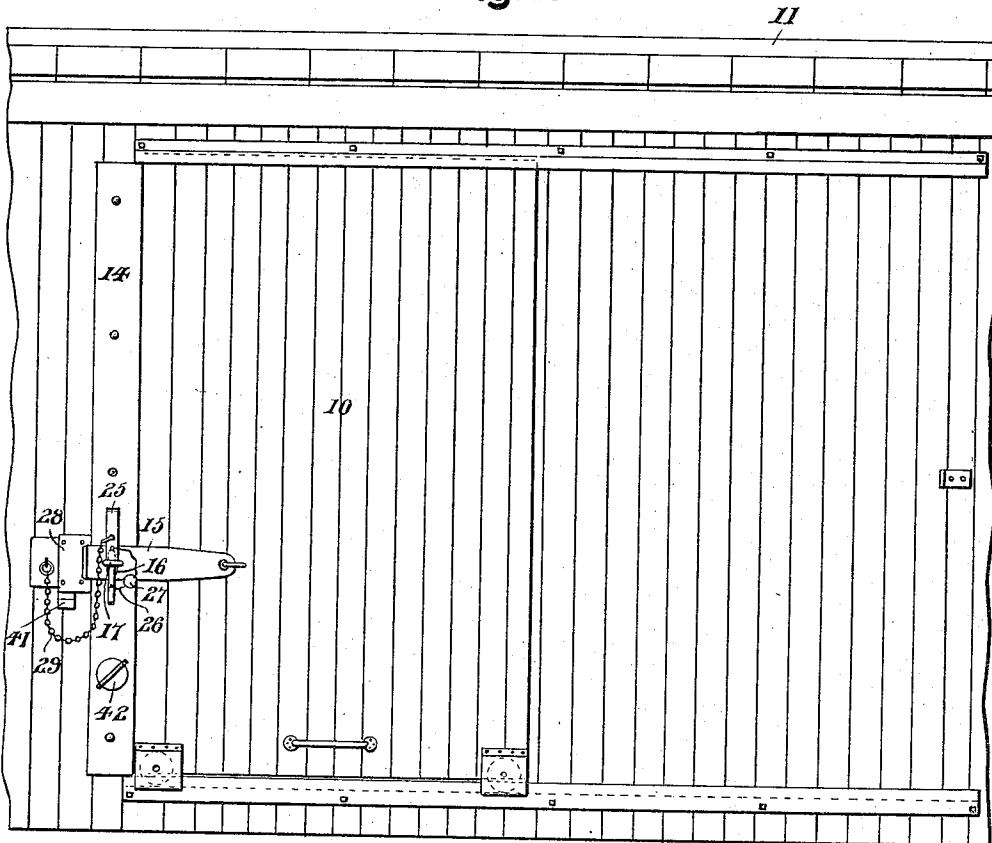
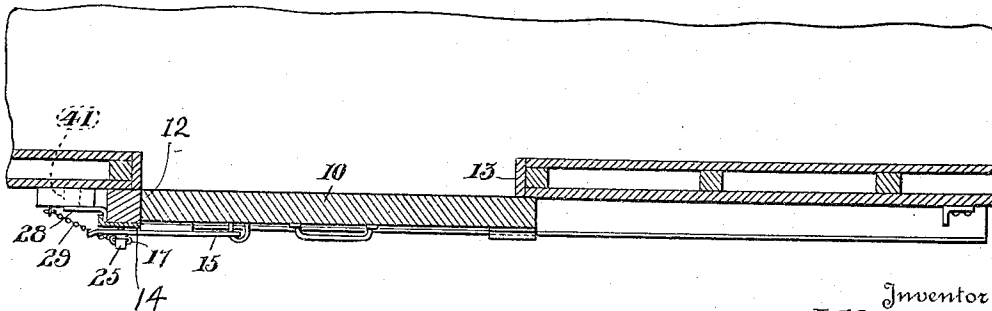


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

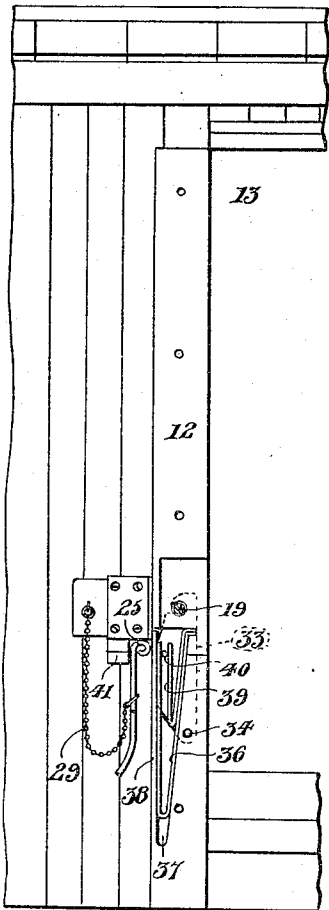


Fig. 5.

Fig. 4.

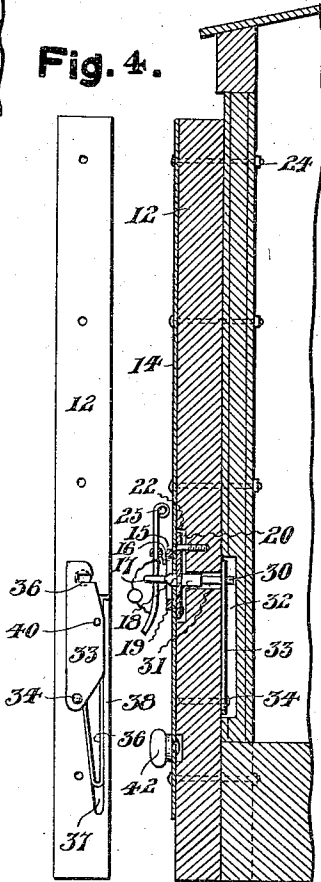


Fig. 6.

Fig. 7.

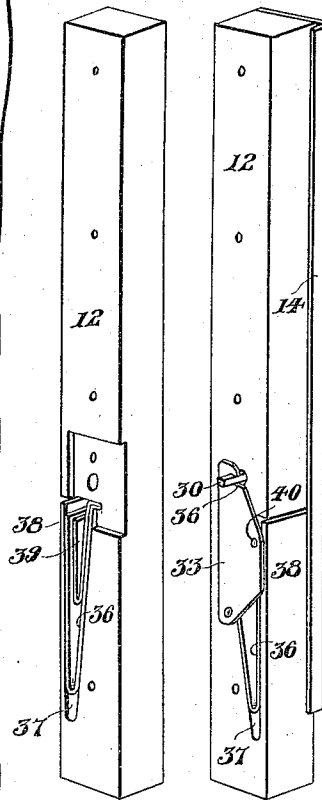


Fig. 8. Fig. 9.

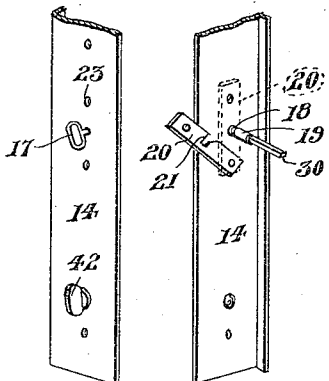


Fig. 10. Fig. 11.

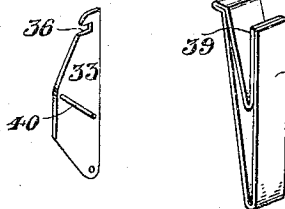
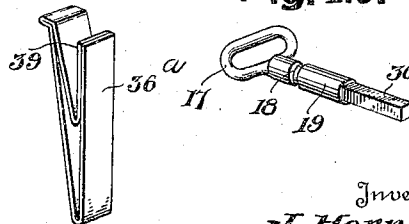


Fig. 12.



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UNITED STATES PATENT OFFICE.

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CAR-DOOR FASTENER.

1,171,047.

Specification of Letters Patent.

Patented Feb. 8, 1916.

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To all whom it may concern:

Be it known that I, JOHN HORNAGY, a subject of the Emperor of Austria-Hungary, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Car-Door Fasteners, of which the following is a specification.

This invention relates to certain new and useful improvements in car door fasteners.

The primary object of the invention is the provision of a fastener or lock for a sliding car door, the same being arranged for actuation without the employment of a key but in a peculiar manner not easily discernible by a person unfamiliar with the lock.

A further object of the invention is the provision of a safety hold-fast device for a door giving the substantial appearance of an ordinary hasp fastener, but designed for retaining the door in its closed position until mechanically actuated in a particular manner.

This invention also designs to provide a swinging hasp upon a door, the same having a revoluble keeper or staple provided with a spring-actuated rotation-preventing means which may be released only upon the exertion of pressure at a designated point adjacent the staple and the device being also provided with a blind turn-knob.

With these general objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings forming a part of this application and in which like designating characters refer to corresponding parts throughout the several views:—Figure 1 is a side elevation of a freight car showing the sliding door thereof in its closed position and provided with the present device. Fig. 2 is a horizontal sectional view thereof. Fig. 3 is a fragmentary side view of the same with the door open and the cover plate of the device removed. Fig. 4 is an elevational view of the inner or rear side of the lock casing door. Fig. 5 is a vertical longitudinal sectional view of the device positioned upon the car side and taken upon a plane longitudinally of the door jamb. Fig. 6 is

a perspective view of the forward side of the door jamb. Fig. 7 is a perspective view of the side of the door jamb having the cover plate secured thereto. Figs. 8 and 9 are respectively front and rear perspective views of a portion of the cover plate removed. Fig. 10 is a perspective view of the keeper locking plate detached. Fig. 11 is a perspective view of the actuating spring for the locking plate, and Fig. 12 is a perspective view of the keeper staple detached.

While the present device is designed for employment in securing any form of door in its closed position, the same is especially designed for use in connection with sliding doors and is herein illustrated as a retaining means for the sliding door 10 of a freight car 11.

A door jamb 12 is arranged adjacent one end of the door opening 13 of the car 11 and is adapted to be contacted by the adjacent edge of the door 10 when the door is in its closed position. A cover plate 14 is arranged upon the door jamb 12 slightly projecting over the door opening 13, thus overlying the adjacent edge of the door 10 when the latter is closed as best illustrated in Fig. 1 of the drawings.

A swinging hasp 15 is carried by the door 10 and is provided with a transverse slot 16 therein adapted for the reception of a keeper or staple 17 rotatably carried by the plate 14. The keeper 17 is of the form best illustrated in Fig. 12 of the drawing and is provided with an annular groove 18 at a point rearwardly of the hasp 16 when the shaft 19 of the keeper is projected therethrough, and a swinging retaining bar 20 is carried by the rear face of the plate 14 and is provided with a slot 21, the side walls of which are received within the said groove 18 for preventing the removal of the keeper, although allowing the same to rotate freely. A screw 22 is removably positioned through a perforation 23 of the plate 14 and extends through the bar 20 and into the jamb 12 for retaining the said bar against any swinging movement for releasing the keeper.

A plurality of bolts 24 are secured through the plate 14 and door jamb 12 and extends through the adjacent side of the car for retaining the beam and plate in position.

When the keeper 17 is positioned vertically as operatively arranged, the slot 16 of the hasp 15 may be positioned thereover, and

the keeper 17 turned horizontally. A pin 25 is readily placed through the keeper 17, while a sealing wire 26 is attached to the pin 25 and retained in any desired manner as by the usual seal 27. A block 28 is mounted upon the side of the car 11 adjacent the beam 12, while a chain 29 is connected at one end to the said block 28 and at its other end to the said pin 25, thus preventing a loss of the said pin when not in use although allowing its free operation in connection with the hasp 15.

The shank 19 of the keeper 17 is provided with a terminal squared portion 30 and the said shank is arranged projecting through a transverse perforation 31 of the jamb 12 with the squared portion 30 thereof extending within a recess 32 in the adjacent side of the car. A locking plate 33 is positioned within the said recess 32, being pivoted upon a pin 34 and having a slot 36 in one side thereof adapted to be received on the squared portion 30 of the keeper shank and thereby preventing the rotation of the keeper 17.

An operating spring 36^a is positioned within a V-shaped socket 37 in the jamb 12 and bears against the outer thin wall 38 of the said socket which wall is in the form of a resilient strip and normally held outwardly against the adjacent edge of the block 28 by the said spring 36^a. The spring 36 is of double V-shaped formation having an inner spring portion 39, the spring 36^a being formed of a single piece of resilient metal bent upon itself and having its opposite ends lying substantially in parallelism.

An operating pin 40 is carried by the locking plate 33 and is positioned between the parallel ends of the spring 36^a as best illustrated in Fig. 3 of the drawings, wherein it will be seen that the inner spring portion 39 normally retains the locking plate 33 engaged with the keeper shaft 19.

From this detailed description of the device, it will be readily understood that when the door is locked as illustrated in Fig. 1, the seal 27 may be broken and the pin 25 released. The keeper 17 however will be retained against rotation by the locking plate 33 and lying transversely of the slot 16 of the hasp 15, the door will still remain locked. The pin 25 may then be employed as a lever and a projection 41 of the block 28 utilized as a fulcrum as best illustrated in Fig. 3 of the drawings, and the wall 38 depressed against the action of the spring 36^a and thus moving the locking plate 33 by means of its pin 40 to its released position by disengaging the hook 35 thereof from the squared end 30 of the keeper 17, whereby the said keeper may be given a quarter turn to position the same vertical and allowing the removal of the hasp 15 therefrom. A turn knob 42 is carried by the cover plate 14 for

misleading a person unfamiliar with the lock construction into the erroneous assumption that the same constitutes a lock releasing device. The locking operation is accomplished in substantially the reverse manner by positioning the hasp 15 upon the keeper 17 and then depressing the side 38 and turning the keeper to its locked position and thereafter inserting the pin 25 and applying the seal and wire thereto.

While the form of the invention herein shown and described is what is believed to be the preferred embodiment thereof, it is nevertheless to be understood that minor changes may be made without departing from the spirit and scope of the invention as claimed.

What I claim as new is:—

1. A lock comprising a rotatable keeper, a swinging hasp provided with a receiving slot for the said keeper, a pivoted locking plate having a slot in normal engagement with the said keeper, a positioning spring for the said plate, and a resilient depressible wall in engagement with the said spring.

2. A lock comprising in combination with a door and a stationary door jamb therefor, a swinging hasp upon the said door having a transverse slot therein, a cover plate upon the said jamb, an elongated keeper for the said hasp journaled through the said plate and jamb and removably attached to the said plate, a rotation-preventing locking plate for the said keeper pivoted to the inner side of the said beam, the said beam having a socket adjacent the opposite side thereof providing a thin resilient outer exposed wall, an operating pin carried by the said plate and projecting within the said socket, and a spring positioned within the said socket and resiliently engaging the said wall and pin.

3. A lock comprising in combination with a door and a stationary door jamb therefor, a swinging hasp upon the said door having a transverse slot therein, a cover plate upon the said beam, an elongated keeper for the said hasp journaled through the said plate and jamb and removably attached to the said plate, a rotation-preventing locking plate for the said keeper pivoted to the inner side of the said jamb, the said beam having a socket adjacent the opposite side thereof providing a thin resilient outer exposed wall, an operating pin carried by the said plate and projecting within the said socket, a spring positioned within the said socket and resiliently engaging the said wall and pin, for retaining the plate in its locked position, a stationary fulcrum member positioned adjacent the said resilient wall, and a depressing operating lever for the said wall.

4. A lock comprising in combination with a door and a stationary door jamb therefor, a swinging hasp upon the said door having a transverse slot therein, a cover plate upon

the said jamb, an elongated keeper for the said hasp journaled through the said plate and jamb and removably attached to the said plate, a rotation-preventing locking plate for
5 the said keeper pivoted to the inner side of the said jamb, the said jamb having a socket adjacent the opposite side thereof providing a thin resilient outer exposed wall, an operating pin carried by the said plate and projecting within the said socket, a spring positioned within the said socket and resiliently
10 engaging the said wall and pin for retaining the plate in its locked position, a stationary fulcrum member positioned adjacent the

said resilient wall, and a combined keeper 15 and cotter and operating lever for the said depressible wall carried by the adjacent side of the car.

5. A lock including a rotatable keeper having a shank angular in cross-section for 20 a portion of its length, and spring-pressed means engageable with said angular portion to prevent rotation of the keeper.

In testimony whereof I affix my signature.

JOHN HORNÁGY.

Witnesses:

ALEX GRAD,

JOS. MARSCHALL.

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