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R. L. RILEY.
DEVICE FOR RELEASING TRUCKS FROM CARS.
APPLICATION FILED JULY 17, 1903.

NO MODEL.

Fig. 1.

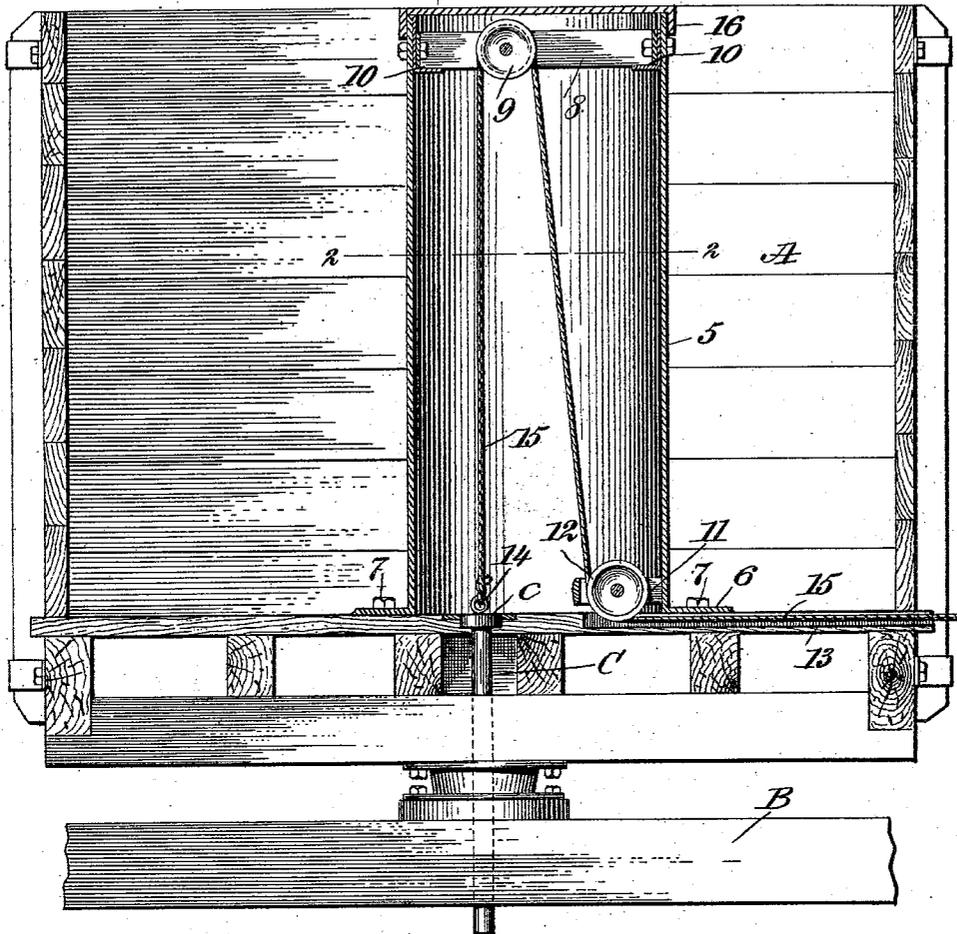
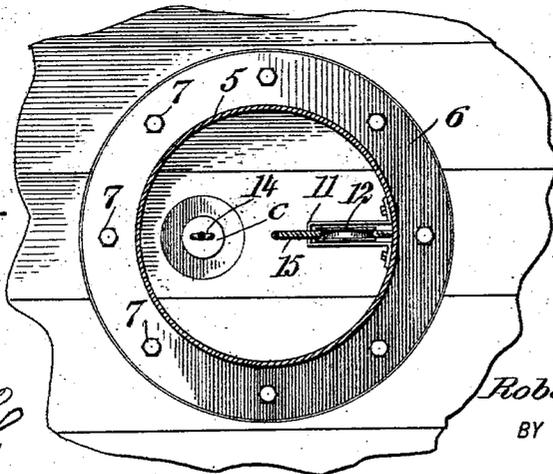


Fig. 2.



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ROBERT LESLIE RILEY, OF NEWBURGH, NEW YORK.

DEVICE FOR RELEASING TRUCKS FROM CARS.

SPECIFICATION forming part of Letters Patent No. 752,467, dated February 16, 1904.

Application filed July 17, 1903. Serial No. 165,951. (No model.)

To all whom it may concern:

Be it known that I, ROBERT LESLIE RILEY, a citizen of the United States, and a resident of Newburgh, in the county of Orange and State of New York, have invented a new and Improved Device for Releasing Trucks from Cars, of which the following is a full, clear, and exact description.

This invention relates to certain novel and useful improvements in devices for releasing the trucks of cars, and has particular application to improvements for lifting king-bolts which connect the car-body with the bolster of the truck. In the present instance I have particularly in view as an object the provision of means adapted to be operated from the outside of a car and connected to the king-bolt whereby the latter may be easily and readily removed to withdraw the truck from connection with the car-body.

As is well known, the trucks ordinarily in use are connected to a car-body through the medium of a large bolt or pin, generally termed a "king-pin," and in order to remove this king-pin and disconnect or remove the truck from beneath a car-body it is necessary to enter the car and pull the pin from its socket, and this method is inconvenient and troublesome, especially when a car is loaded with a cargo of heavy material—such as lumber, grain, or the like—as it is necessary to move or shift such material immediately adjacent to the pin-socket in order to have access to the king-pin; but with my invention the pin may be easily, quickly, and conveniently removed without entering the car, and consequently without disturbing in any manner the contents thereof.

To the accomplishment of the above-recited object and others of a similar nature my invention consists in the construction, combination, and arrangement of parts, as is described in this specification, delineated in the accompanying drawings, and set forth in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a transverse vertical sectional

view taken through a car-body having my improvement applied thereto, such view also showing a portion of the bolster of the truck; and Fig. 2 is a sectional view of my improved device, taken on the line 2 2 of Fig. 1.

Referring now to the accompanying drawings in detail, and in particular to Fig. 1 thereof, the letter A designates a car-body of an ordinary and well-known type, such as is generally found in box-cars, while B indicates the bolster of a car-truck designed to support said body. The aforesaid car-body is designed to be connected with and supported upon the bolster through the medium of a king-pin, such as is shown at C, which is seated in a socket in the floor of the car, the shank of the bolt extending down to and through the bolster B. In order to easily and quickly remove the pin from its socket, I have devised the following means, which I will now proceed to describe in detail:

Mounted upon the floor of the car and surrounding the socket is a relatively large tubular casing or shield, which I have designated as a whole by the numeral 5, such shield having an outwardly-extending flange, as at 6, formed at the lower end thereof, through which extend bolts, as at 7, whereby the casing or shield is rigidly secured to said floor. Within the casing, preferably near the top portion thereof, is secured a cross-bar, as at 8, adapted to act as a support for a sheave or pulley 9, and in order to provide for the ready removal of the sheave or pulley and its support when necessary I have arranged lugs, as at 10 10, at opposite sides of the tubular shield, said bar 8 being adapted to be removably seated on said lugs.

At the lower end of the tubular shield is secured a supporting-bracket, as at 11, carrying a pulley 12, similar to the pulley 9, while extending from a point beneath such bracket to a point outside of the car is a groove or channel 13, cut in the floor of the car, for a purpose to be hereinafter referred to.

The head portion *c* of the king-pin C is provided with a ring, as at 14, to which ring is secured one end of a cable or rope 15, formed, preferably, of wire or other suitable material, said rope extending up over the pulley

9 and down to and around the pulley 11 at the lower end of the car and thence out through the groove or channel 13 to a point outside the car-body, where it is provided with any suitable handhold. (Not shown.)

From the above description, taken in connection with the drawings, the construction and operation of my improved device will be readily apparent.

When it is desired to remove the king-pin from its socket, it is only necessary for a person standing outside the car to pull upon the rope or cable 15, which will draw the pin from its socket, and the truck may be readily removed from beneath the car-body.

The shield or casing 5 is so arranged that the socket and pin and mechanism for drawing the pin from the socket are protected from contact with the material forming the cargo of the car, and there is no necessity for shifting such material to have access to the pin.

The casing or shield is provided with a suitable cover, (indicated by the numeral 16,) so that should the cargo of the car consist of a granular substance small particles will not drop through the casing and interfere with the operation of the pin-releasing device.

While in the present instance I have shown one particular embodiment of my invention, I wish it to be understood that I do not confine myself to all the precise details of construction shown herein, as there may be modifications and variations in certain respects without departing from the spirit of the invention. For instance, I may connect two or more pulleys 9 to the cross-support 8 and suspend therefrom additional king-pins and cables, so that should it be desired to substitute one of such pins for that in the socket without disconnecting the truck from the car such may be easily and readily accomplished by substituting one pin for another.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A device of the class described comprising a shield or casing, a support arranged therein, a pulley mounted on said support, and

means extending over said pulley and connected with a king-pin for elevating and lowering the latter.

2. The combination with a car-body, a car-truck and a king-pin connecting the body and the truck, of means for elevating and lowering the king-pin, such means comprising a support, and a cable extending over said support and connected with said king-pin.

3. The combination with a car-body, a truck and a king-pin connecting the body and the truck, of means for elevating and lowering the king-pin, such means comprising a shield or casing, a support arranged therein, and a flexible connection secured to the pin and extending over said support and running to a point outside the car.

4. The combination with a car-body, a truck therefor, and a pin seated in a socket formed in the car and connecting the body and the truck, of means for elevating and lowering said pin in the socket, such means comprising a shield or casing surrounding the socket, a supporting-bar secured within said casing, a pulley mounted upon said bar, a supporting-bracket also secured to the casing at a point beneath the aforesaid bar, a second pulley secured to said bracket, and a cable passing over said pulleys and connected to the pin, substantially as set forth.

5. The combination with a car-body, a truck, and a pin connecting the body and the truck, of means for elevating and lowering the pin, comprising a cable connected to the pin and passing over pulleys, and through a groove or channel in the car to a point outside the latter, a casing or shield surrounding the cable and the pulleys, and a covering for said shield or casing, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT LESLIE RILEY.

Witnesses:

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EDWARD A. BUSH.