

E. H. JANNEY.

UNCOUPLING DEVICE FOR RAILWAY CARS.

No. 412,259.

Patented Oct. 8, 1889.

Fig. 1.

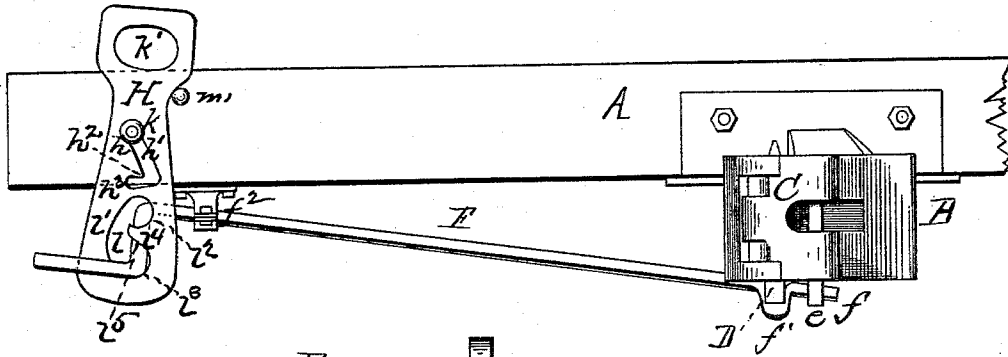


Fig. 2.

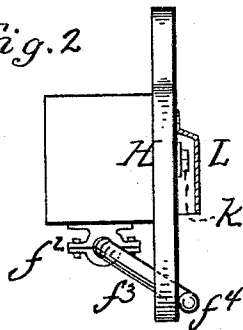


Fig. 3.

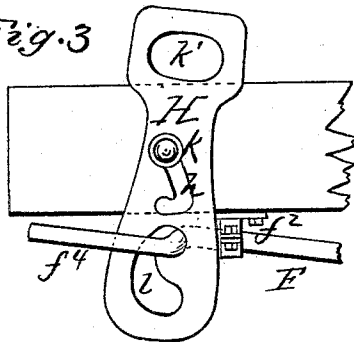
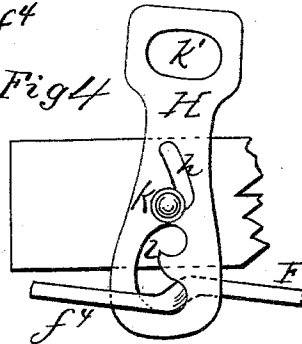


Fig. 4.



Witnesses

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J. C. Schaefer

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 per *W. M. Singleton,*
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Fig. 5.

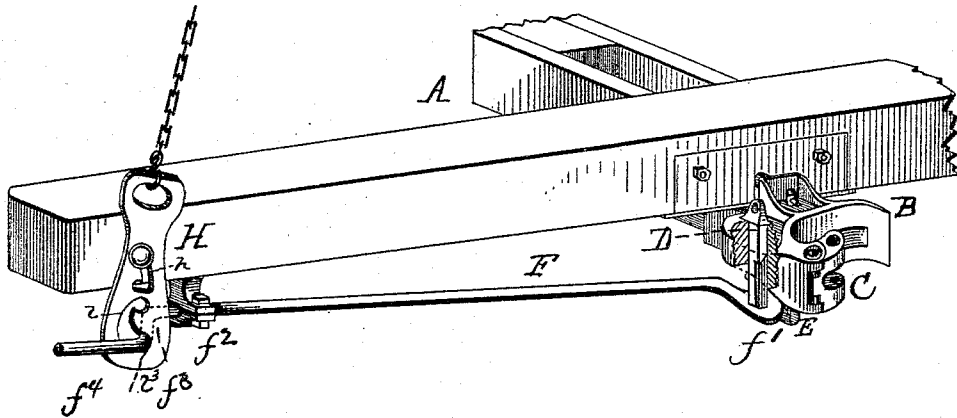


Fig. 6.

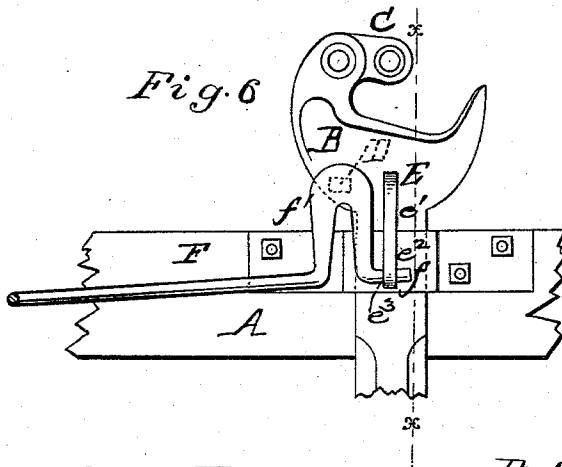


Fig. 7.

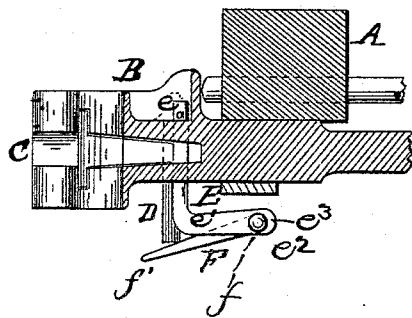


Fig. 8.

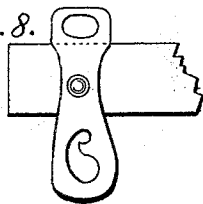


Fig. 9.

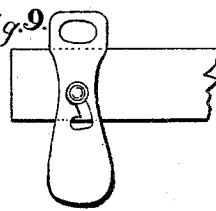


Fig. 10.



Witnesses

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UNITED STATES PATENT OFFICE.

ELI H. JANNEY, OF NEAR ALEXANDRIA, VIRGINIA.

UNCOUPLING DEVICE FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 412,259, dated October 8, 1889.

Application filed March 6, 1889. Serial No. 302,097. (No model.)

To all whom it may concern:

Be it known that I, ELI H. JANNEY, a citizen of the United States, residing near Alexandria, in the county of Fairfax and State of Virginia, have invented certain new and useful Improvements in Uncoupling Devices for Railroad-Cars; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a front view of the device; Fig. 2, an edge view. Figs. 3 and 4 show the hanger in different positions. Fig. 5 is a perspective view. Fig. 6 is a bottom view. Fig. 7 is a section on line $x x$, Fig. 6. Figs. 8 and 9 are modifications. Fig. 10 shows the hanger turned around.

This invention relates to improvements in uncoupling devices for railway-car couplers, more especially to that class on which various patents have been granted by the United States Patent Office to me, and which are known as the "Janney type;" and of these it relates specifically to the coupler used on freight-cars where a vertically-sliding pin is used for locking the "jaw." On all freight-cars it is recognized that it is almost absolutely essential that the coupler shall be manipulated from the side of the car or from its top. Many and various have been the appliances to render such operation feasible and simple.

The present invention produces a device which can be operated with absolute certainty from either place, which can be readily, speedily, and easily manipulated, and by which the couplers can be kept in an uncoupled position.

The invention consists, primarily, in an uncoupling-lever in conjunction with a peculiarly-constructed hanger by which the lever is manipulated, as will be set forth.

In the annexed drawings, the letter A indicates one end of a car, to which is attached in the usual way the coupling-head B. This head has the usual jaw C and vertically-sliding locking-pin D. Passing up vertically

through the head B is the vertical arm e of an elbow-bracket E, the horizontal arm e' of which projects, preferably, to the rear under the head B. This bracket E is rigidly secured to the head B. In the outer end e^2 of the arm e' is made an eye e^3 , in which loosely rests the inner end f of the uncoupling-lever F, the end f being preferably bent to prevent accidentally being pulled out of the eye e^3 . This uncoupling-lever F passes below the head B under pin D and off to the side of the car. Under the pin D this lever is made with a flattened bend f' , this bend projecting to the front and coming immediately beneath the said pin D. Near the end of the car the lever F passes loosely through a box or bearing f^2 , beyond which the end of the lever is turned at right angles to the main part and then parallel thereto, as at $f^3 f^4$, forming a handle. Contiguous to this handle a hanger H is pivoted to the car. This hanger H is preferably provided with two slots $h l$, one above the other. The lower slot l is somewhat shaped like an inverted ear. It has the curved edge l' and the concave seats $l^2 l^3$, the former being formed by the projection l^4 , which has the convex curve l^5 below. The upper slot h is J-shaped, the stem h' of the slot being slanted downwardly from left to right, and a projection h^2 forms the catch h^3 . Through this slot h passes the pivot-pin k , by which the hanger is held to the car. At the top the hanger has the loop k' , from which a rod runs to the top of the car. To the inside of the hanger is secured a stop m , the exact location of which will be hereinafter defined.

The operation of this device is as follows: As shown in Fig. 5, the coupler is fastened and the uncoupling device is ready for operation. When in this position, the bend f' is a little below the end of the pin D, and the handle of the uncoupling-lever rests in the bottom of the slot l on the seat l^3 . The inner end of the uncoupling-lever F being thus connected to the coupling-head, there is a free movement of the lever as the head moves, there being plenty of play of the lever to allow for this movement. Also the inner end of the uncoupling-lever maintains a fixed relation with the coupling-head and the coupling-pin. Hence whatever the movement of

the head there is no play of the lever under the pin, and in any position of the head the lever is in position to lift the pin.

If it be desired to uncouple the cars from the side, the handle is lifted from the seat l^3 into the seat l^2 , the bend f' bearing against the pin D and lifting it out of engagement with the jaw C. By making this bend f' in the lever, and especially by flattening it, a slight torsion is given to the lever, so that when the handle is placed in the seat l^2 this spring-pressure of the lever retains the handle from accidental dislodgment; also, if the hanger is not put into exactly the proper position for the handle to be lifted into the seat l^2 , this slight torsion permits of the handle being put into place.

If it be desired to uncouple from the top, the hanger is pulled up, the slot h riding past the pin k , the handle of the uncoupling-lever F being raised with the hanger. As soon as the bottom of the slot h reaches the pin k the hanger is swung to one side, so as to bring the pin k under the catch h^3 . To release the lever in either instance the hanger is swung to one side. The shape of the slots h and l is such as to facilitate the operation of manipulating the uncoupling-lever.

When the handle is grasped at the side of the car and lifted from the bottom of the slot l up to the seat l^2 , striking against the curve l^3 , the hanger is swung inwardly, allowing the handle to pass the projection l^4 , when gravity causes the hanger to fall back and the handle is received on the seat l^2 . When the handle thus rests on the seat l^2 , it is held there by reason of the hanger being held in position by gravity. At the same time the torsion of the uncoupling-lever tends to bind the handle on the seat l^2 , and thus assists in holding the uncoupling-lever up.

The shape of the slot h insures the operation of the device when manipulated from the top of the car. It is only necessary to pull upward on the hanger, when the slot h slides about the pin k , moving the upper end of the hanger outward until the bottom of the slot reaches the pin. The continued direct upward pull causes the hanger to move inwardly, so that the pin k comes in under the projection h^2 and rests on the seat h^3 . At the same time this action is assisted by the pull of the handle of the uncoupling-lever in the slot l .

The cars can also be uncoupled by simply pulling the upper end of the hanger outwardly.

To release the hanger, it is only necessary to pull the upper end outwardly or push the lower end inwardly.

The stop m , to limit the inward movement of the upper end of the hanger, is for this purpose: In coupling an ordinary link to the jaw C the pin D may be held up by the handle of the uncoupling-lever resting on the seat l^2 . On starting the cars, the coupling-head, being pulled out, moves the uncoupling-lever, and as the lower end of the hanger cannot move outwardly the handle is thrown from the seat l^2 , the pin D drops, and the first time the cars run together the jaw C is locked. Instead of having the two slots, either the top or bottom may be used alone, as shown in Figs. 8 and 9. In the first instance the hanger is held by a pivot-pin on which it does not slide. In the other instance the lower slot is simply omitted; also, if desired, the hanger may be turned around, as shown in Fig. 10, the construction and operation being the same as that already described, or either one of the slots may be reversed.

If desired, a hood L, Fig. 2, may be placed over the pivot-pin k and slot h .

Having thus described my invention, what I claim is—

1. The combination of the uncoupling-lever with the slotted hanger, the latter pivoted to the car, and the outer end of the lever passing through the hanger, as set forth.

2. The combination of the uncoupling-lever with a hanger having a slot in which rests the outer end of the lever, the hanger being pivoted to the car, as set forth.

3. A car-coupling uncoupling-lever hanger having the two slots, in combination with the uncoupling-lever, the outer end of which rests in the lower slot, and a pivot-pin passing through the upper slot.

4. The uncoupling-lever pivoted to the coupling-head and having the bend, in combination with the coupling-pin, said bend being under the pin, as set forth.

5. The uncoupling-lever having the flat bend, in combination with the coupling-pin, the bend being below the coupling-pin, as set forth.

6. The coupling-head having the coupling-pin and provided with the bracket, in combination with the uncoupling-lever held at one end in said bracket and passing under the coupling-pin, as set forth.

7. The hanger pivoted to the car, in combination with the limiting-stop, as set forth.

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

ELI H. JANNEY.

Witnesses:

M. DORIAN,
JAMES H. WEIR.