

(No Model.)

R. J. REYNOLDS.
CAR COUPLING.

No. 479,989.

Patented Aug. 2, 1892.

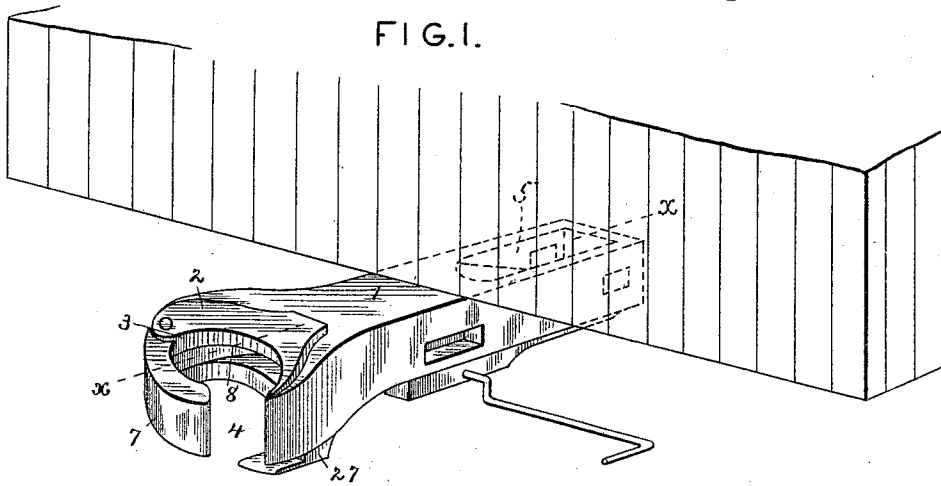


FIG. 2.

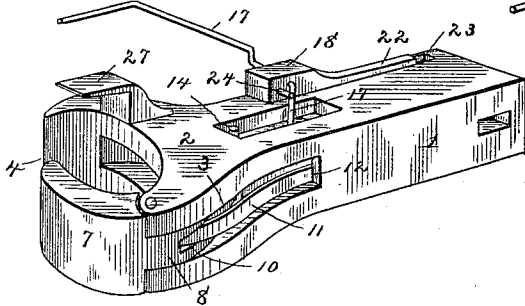


FIG. 3.

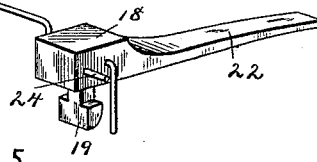


FIG. 5.

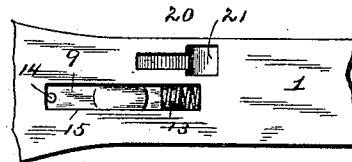


FIG. 4.

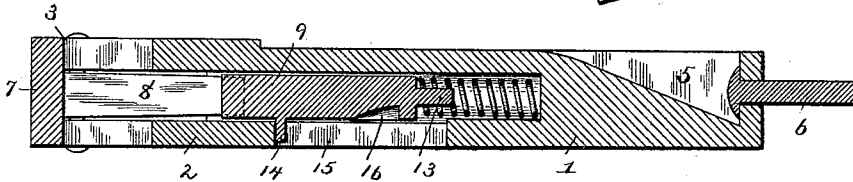
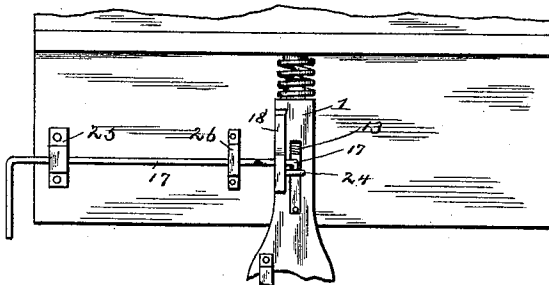


FIG. 6.



Witnesses

Inventor

Harry L. Amer.

R. J. Reynolds.

Chas. S. Hyer

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

RICHARD J. REYNOLDS, OF SPRINGVILLE, ALABAMA, ASSIGNOR OF ONE-HALF
TO GEORGE M. JONES, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 479,989, dated August 2, 1892.

Application filed March 30, 1892. Serial No. 427,046. (No model.)

To all whom it may concern:

Be it known that I, RICHARD J. REYNOLDS, a citizen of the United States, residing at Springville, in the county of St. Clair and State of Alabama, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings; and it consists of the construction and arrangement of the parts, as will be more fully hereinafter described and claimed.

The object of this invention is to simplify the construction and arrangement of the several parts to facilitate a more positive action and also to render the device strong and durable, conveniently applied, and easily handled and understood.

In the drawings, Figure 1 is a perspective view of the improved car-coupling, shown applied to a portion of a car. Fig. 2 is a detail perspective view of the coupling removed and looking on the bottom surface thereof. Fig. 3 is a detail perspective view of one of the parts. Fig. 4 is a longitudinal vertical section on the line *xx*, Fig. 1. Fig. 5 is a bottom plan view of a portion of the draw-head. Fig. 6 is a detail view showing the manner of extending the operating-lever to one side of the car.

Similar numerals of reference indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 designates the draw-bar having a head 2 at its front end formed with a bifurcation 3 and a recess 4, somewhat similar, after the manner of this class of twin-jaw couplings. In the upper face of the rear portion of the draw-bar a slot or recess 5 is formed to receive the headed end of a tail-pin 6, which extends through the end of the said draw-bar, and is secured to the frame of the car in the usual manner. This slot or recess 5 is formed with a bottom inclined surface, so that the head of the tail-pin will not slip after being mounted therein and while the said draw-bar is inserted through the attachments which hold the same to the car-body. Within the bifurcated portion of the head is pivotally mounted a jaw 7, having a shank projecting rearward into the draw-bar and adapted to be engaged by a sliding dog 9 to hold the same and the said jaw in locked position. The said shank 8 is

formed with an inner tapered end, and the dog 9 is constructed with an outer rounded end to thereby permit the said shank to pass freely over the end of the dog and be automatically locked when engaged by an oppositely-situated jaw in coupling cars. The outer edge of the shank 8 is formed with a recess 10, in which is seated the end of a spring 11, which extends through a recess 12, formed in the side of the draw-head 2, and by means of said spring the jaw 7 is automatically forced outward or opened into coupling position when released from the dog 9. The dog 9 is formed with a rearward shank 13, encircled by a coiled spring to normally impel the same outward, and from the under surface of said dog depends a pin 14, which extends through a slot 15, formed in the draw-bar, and acts to limit the outer impelled movement of the said dog. Adjacent to said pin 14 a recess 16 is formed in the said dog and terminates in a shoulder adapted to be engaged by the angularly-bent end of a releasing-lever 17, which is pivotally carried by a support 18, having a headed pin 19, extending through a slot 20 in the draw-bar and adapted to be released from said draw-bar by passing out through an enlargement 21 at one end of said slot. The said support has a rearwardly-extending arm 22, which is yielding and has its rear end fitted in a recess 23 in the said draw-head. By means of this construction the releasing-lever 17 is removably connected to the draw-head and may be readily applied and detached when found desirable. A stop-pin 24 is secured to the support 18 to limit the forward movement of the angular portion of the said lever 17. This lever may be engaged from the side of the car or be connected to a suitable operating-lever extending up to the platform of the car, as ordinarily the case in couplings of this class; but, as shown in Fig. 5, said lever is projected from the side of the car and arranged for use in connection with freight or analogous cars. On either side of the car-body depends a bearing 25, in which the arm or lever 17 is rotatably mounted, and extends inward through a stirrup 26, located adjacent to the support 18 of the inner end of said arm or lever. The said arm or shaft must have a loose movement in

the said bearing 25 and the stirrup 26 must be wide and low enough as to avoid touching the said arm or lever when the draw-head moves by holding up the said arm or lever if the draw-head should pull out of its connection with the car. The draw-head is provided with an arm 27, depending from the lower side thereof, to prevent a draw-head of a similar construction, locked to that shown in the accompanying drawings, from falling down onto the track should it happen to be pulled out of position.

In operation the jaw 7 is arranged in the coupling position shown in Fig. 2, with the shank thereof extending across the bifurcation of the draw-head. A similar jaw, which will be oppositely situated, striking the said shank, will force the same backward within the bifurcation and over the end of the dog 9, and thereby lock the twin jaws into each other. To release the jaws, the releasing-lever 17 is operated to draw the dog 9 backward, and the said jaw is thereby automatically opened.

This form of coupler is very convenient and easily operated, owing to the simplicity of the construction of the several parts.

Having thus described the invention, what is claimed as new is—

1. In a car-coupling, the combination of a draw-head having a draw-bar extending rearward therefrom provided with a recess in the upper face thereof near one end having an inclined bottom surface, and a tail-pin fitted in said recess, substantially as described.

2. In a car-coupling, the combination of a draw-head having a jaw pivotally mounted therein provided with a shank, a spring seated in the side of said draw-head and engaging said shank of the jaw, a dog movably mounted within the draw-bar and adapted to engage the shank of the jaw, an operating-lever to engage said dog, and a support removably connected to the draw-bar, in which said operating-lever is pivotally mounted, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

RICHARD J. REYNOLDS.

Witnesses:

WM. P. HATTER,
ANNA W. CRANDALL.