(No Model.)

J. E. WARD & J. A. FALLGATTER.

CAR COUPLING.

No. 385,027. Patented June 26, 1888.

Fig I.

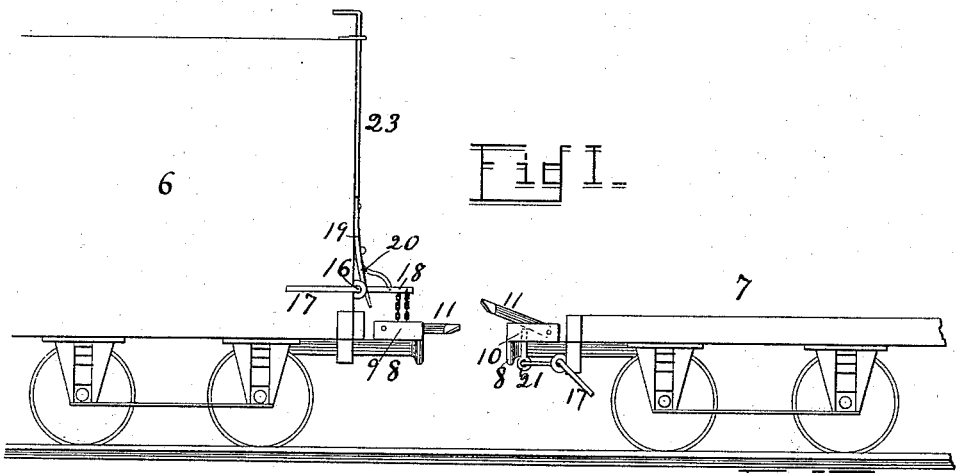


Fig III.

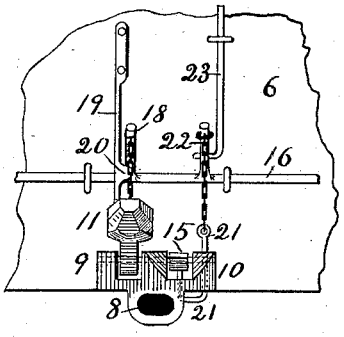


Fig II.

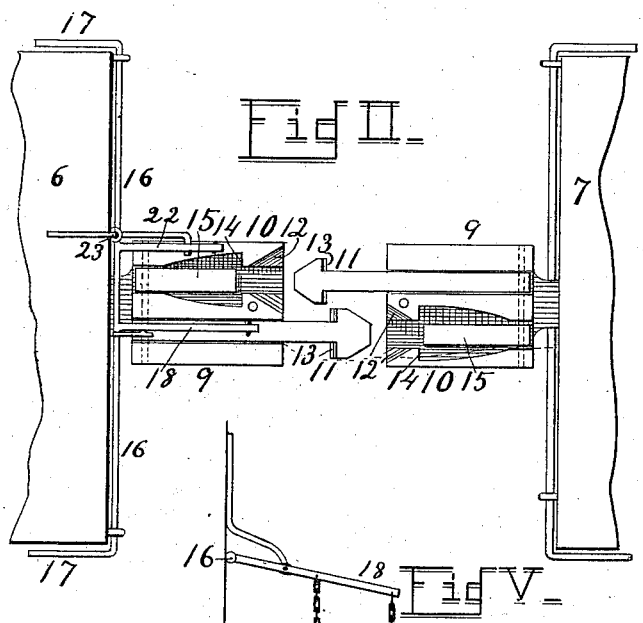


Fig IV.

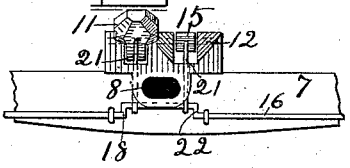
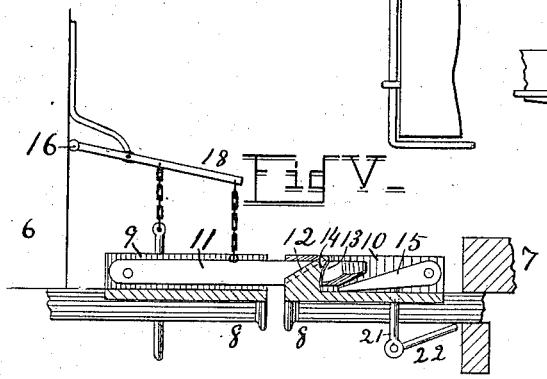


Fig V.



Witnesses.
S. E. E. Stevens.
P. E. Stevens,

Inventor.
John E. Ward.
John A. Fallgatter.
By their Attorney H. E. Stevens.

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN E. WARD AND JOHN A. FALLGATTER, OF HURON, DAKOTA TERRITORY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 385,027, dated June 26, 1888.

Application filed March 29, 1888. Serial No. 268,745. (No model.)

To all whom it may concern:

Be it known that we, JOHN E. WARD and JOHN A. FALLGATTER, citizens of the United States, residing at Huron, in the county of Beadle, Dakota Territory, have invented certain new and useful Improvements in Automatic Car-Couplings; and we 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 automatic car-couplings; and it has for its object, first, to provide double means to insure the cars connecting automatically when they come together, and double means to guard against accidents from uncoupling or breaking; second, to provide means whereby the couplings may be disconnected by a person at either side of the car or on top of it; third, to provide means whereby the automatic coupling may be set not to connect with each other when the cars come together and it is again desired to separate them, and, fourth, to provide means whereby this automatic coupling may be coupled with the usual draw-head link and pin.

To this end our invention consists in the construction and combination of parts forming an automatic car-coupling, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure I is a side elevation of a portion of two cars, showing one of our couplings with the link at rest in position to couple with an approaching draw-head, and showing another of our couplings with the link raised, so that it would not couple if brought to another draw-head. Fig. II is a plan view of a portion of the same on a larger scale. Fig. III is an end view of a portion of a box-car. Fig. IV is an end view of a portion of a platform-car, and Fig. V is a longitudinal vertical section of two couplings connected.

6 represents a box-car, 7 a platform-car, and 8 the common draw-heads, adapted to be connected by a loop-shaped link and pins. On the top of the common draw-head we construct our automatic draw-heads in the form of two boxes, 9 and 10, all as one piece therewith.

11 is a link journaled at its rear end in the box 9, to swing vertically and to rest in the bottom of the box.

The head of our link is arrow-shaped, being slanted forward at its edges and under side, so that it will be readily guided between and over the slanting cheeks 12 of an approaching draw-head, and the shoulders 13 behind the link-head engage the shoulders 14 behind the cheeks 12 to draw the car.

15 is a guard-lever journaled at its rear end in the box 10 and resting its forward end normally in the bottom of the box.

16 is a lifting-bar journaled across the end of the car and provided with levers or handles 17 at each side of the car, and with an arm, 18, connected by a chain with the link 11, whereby a person at the side of the car may raise the link to uncouple the cars, or he may raise the head of the link to aid it to connect with an unusually-high draw-head.

19 is a spring provided with a nib, 20, located a little above the usual path of the arm 18, whereby the said arm and the link may be held raised above their working position when it is not desired to couple this car with another.

21 is a lifter passing up through the bottom of box 10 beneath the guard 15, and connected with an arm, 22, of the lifting-bar 16. The guard 15 is located normally below the incoming link-head, and the act of raising the link by means of the bar 16 and its arm 18 also raises the head of a link, if it is resting in the box 10, by means of the arm 22, lifter 21, and guard 15, so that both links will be uncoupled at once from the opposite draw-heads. Now, if the arm 18 be a little further raised, it will be engaged and held by the rib 20 on the spring 19, whereby the link and the guard will both be held raised, so that this link cannot fall into another draw-head and another link cannot fall into this draw-head.

23 is a rod connected with one arm of the bar 16 and extending to the top of the car, where it is provided with a handle, whereby a person on the car may operate the coupler. Platform-cars 7 do not need the rod 23, and a little modification only is required to adapt the device to such cars. The lifting-bar 16 may be journaled beneath the draw-head and both its arms 18 and 22 be provided with lift-

ers 21, one to engage the link 11 and the other to engage the guard 15. Either of the links 11 will couple and draw the cars if the other should become disabled, and the common draw-head 8 will serve to couple with a car not provided with our automatic coupler.

When the cars are pushed together, the link-heads ride rearward on the guards free from the cheeks 12 and the lifting-bar 16 may be easily worked.

Our two-linked couplings, forming a double guard against breakage and accidental uncoupling, and being simple, easy of operation, inexpensive, and durable, recommend themselves.

Having thus fully described our invention, what we desire to secure by Letters Patent is the following:

The combination, in a car-coupling, of a draw-head provided with the box 10, having the slanting cheeks 12 and the shoulders 14 behind the cheeks, and the box 9 beside the box 10, the link 11, hung in the box 9 and having an arrow-shaped head with shoulders 13, adapted to engage the said shoulders 14 of the box 10, the lifting-bar 16, journaled across the end of the car and provided with levers or handles 17 at the sides of the car, and further provided with two arms, 18 and 22, the guard 15, journaled in the box 10, the lifter consisting of the rod 21, passing up through the bottom of the box 10 beneath the guard, and connections between the said rod and the arm 22 and between the said arm 18 and the link 11, substantially as shown and described.

In testimony whereof we affix our signatures in presence of witnesses.

JOHN E. WARD.
JOHN A. FALLGATTER.

Witnesses as to signature of J. E. Ward:
S. T. WRIGHT,
J. H. HAUSER.

Witnesses to signature of J. A. Fallgatter:
FREEMAN ROBISON,
F. H. SHERIDAN.