(No Model.)

W. P. GINTER.

CAR COUPLING.

No. 263,165 Patented Aug. 22, 1882.

Fig. 1.

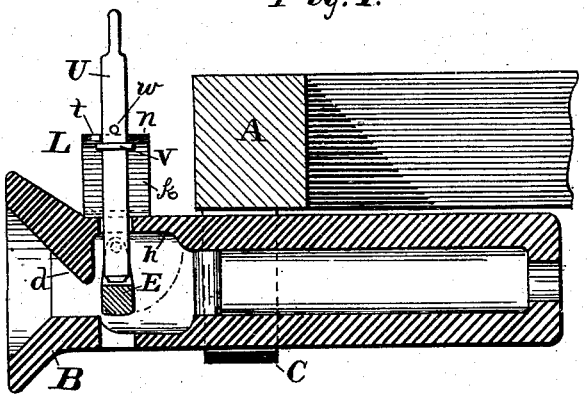


Fig. 2.

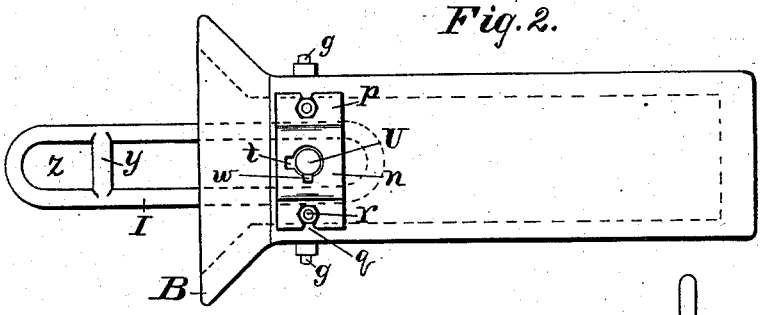


Fig. 3.

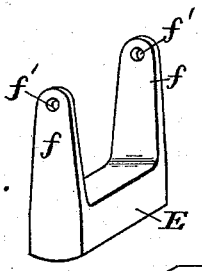


Fig. 4.

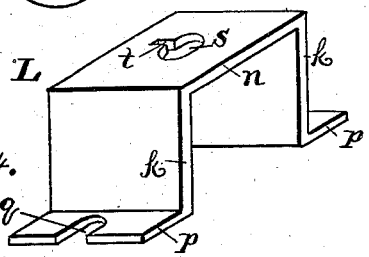
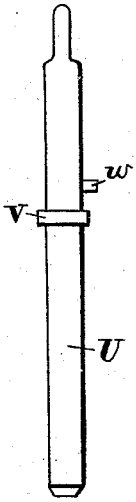


Fig. 5.



Witnesses:

A. C. Eader

John E. Morris

Inventor:

Wm P. Ginter

By his Atty

Chas B. Mann

UNITED STATES PATENT OFFICE.

WILLIAM P. GINTER, OF HUGHESVILLE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JOHN KAHLER, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 263,165, dated August 22, 1882.

Application filed March 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. GINTER, a citizen of the United States, residing at Hughesville, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain improvements in that class of car-couplings in which the coupling-pin is sustained vertically, ready for coupling, by a swinging or pendulous trip.

The construction and operation of the device will first be described, and the invention will then be designated in the claim.

In the drawings hereto annexed, Figure 1 is a vertical longitudinal section of the draw-head. Fig. 2 is a top view of the draw-head and coupling-link. Fig. 3 is a view of the swinging pin-supporter which sustains the pin ready for coupling. Fig. 4 is a view of the combined guide and support for the pin. Fig. 5 is a view of the pin.

The letter A designates the cross-timber of the end of a car; B, the draw-head; C, the strap or hanger attached to the cross-timber by which the draw-head is supported. The mouth of the draw-head is flaring to facilitate the entrance of the link. The flaring upper side, *d*, of the mouth deflects to a point just in front of the coupling-pin hole, and its rear inner side is vertical. A device to sustain the pin in an elevated position, ready for coupling, consists of the swinging horizontal bar E, each end of which has two upright hangers, *f*, whose upper ends, in the present instance, have a hole, *f'*, through which passes a bolt, *g*, entering a hole in each side of the draw-head. It will be seen the bolts *g* serve as a pivot on which the horizontal bar E swings, as indicated by the dotted curved line in Fig. 1.

Instead of the holes in the upper ends of the hangers *f* and the bolts *g*, each of the hangers may have at its upper end a laterally-projecting lug, which shall be adapted, like a trunnion, to serve as a pivot. The interior roof of the mouth from the front edge of the coupling-pin hole rearward is recessed, as at *h*, to afford room for the horizontal bar to swing up out of the way of the link I.

A coupling-pin, combined guide and support L is secured upon the top of the draw-head, and consists of a flat bar of iron, bent or formed as shown in Fig. 4—that is, with two vertical parts, *k*, which support a horizontal or top part, *n*. The base or lower end of each vertical part is turned laterally, as at *p*, and rests upon the top of the draw-head. Each laterally-turned part *p* has a slot, *q*, which is occupied by a bolt, *r*, by which the combined guide and support is made fast to the draw-head. By this construction the device may be easily detached to permit the removal of the coupling-pin should it be broken or be bent. The horizontal part *n* is provided with a round hole, *s*, which is directly above and in vertical line with the coupling-pin hole in the draw-head. A notch, *t*, is formed in the round hole.

The coupling-pin U has a collar, V, located at a point or distance from its lower end sufficient, when the collar rests upon the top of the draw-head, to allow the lower end of the pin to rest in the hole in the lower side of the draw-head. Thus the collar serves as a head or stop to prevent the coupling from dropping through to the ground. A short distance above the collar is a laterally-projecting lug, *w*, the space between the collar and lug being adjusted with reference to the thickness of the horizontal part *n* of the guide and support.

It will be seen that upon raising the coupling-pin the projecting lug thereon will pass through the notch *t* in the hole formed in the horizontal part, and the collar will, by then coming in contact with the lower side of the horizontal part, serve as a stop to prevent the coupling-pin from being withdrawn or accidentally lost. The projecting lug *w* will, when the coupling-pin is partly turned, rest upon the top of the horizontal part, and serve to sustain the pin at all times when it is not desired that a coupling shall be effected.

The link I in the presented example has the usual shape, but is provided near each end with a cross-bar, *y*, which may be straight or curved. These cross-bars form at each end an eye, *z*, through which the coupling-pin passes. This form of link, besides being strong, has ad-

vantages in case the mouth of the draw-head has no rear wall, as, when the coupling-link is in, the cross-bar *y* will prevent the link from being shoved inward or through the rear of the mouth.

Instead of a collar, V, the coupling-pin may be provided with any equivalent stop device—such as a pin to pass through and both ends to project laterally from the coupling-pin.

When uncoupling, the pin U is raised until the lug *w* thereon passes the notch *t* in the horizontal part of the guide and support, (the stop device V will prevent the pin from being drawn entirely out.) By partly turning the pin the lug *w* will rest upon the top of the horizontal part and support the elevated pin until it is desired to again couple. When the pin is in this position the horizontal bar will hang down and occupy position across the opening of the mouth of the draw-head below the lower edge of the upper deflected side. Under such circumstances the entrance into the opening of a link which may be projecting from another car will simply push the swinging bar back and up, and thus do no damage to the pin.

When it is desired to effect a coupling the pin is turned until the lug *w* passes through the notch *t*, when the pin will drop slightly, and its lower end will then rest upon the top of the swinging bar E. In this position the horizontal part *n* serves to guide and support the upper end of the pin. It is now ready for coupling, and the entrance of a link into the opening of the mouth will push the bar back and allow the pin to drop.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

In a car-coupling, the combination of a draw-head having the upper side, *d*, of its mouth deflected, a swinging horizontal bar, E, suspended by hangers across the opening of the mouth below the lower edge of the upper deflected side, a coupling-pin provided with a stop device, V, and a laterally-projected lug, *w*, above the stop device, and a guide and support secured on the top of the draw-head, the said guide and support having a horizontal part, *n*, with a hole for the coupling-pin, and a notch, *t*, formed in the hole for the passage of the laterally-projecting lug on the pin, as set forth.

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

WILLIAM P. GINTER.

Witnesses:
JOHN E. MORRIS,
JNO. T. MADDOX.