(No Model.)

A. TRAUTMAN.

CAR COUPLING.

No. 490.604. Patented Jan. 24, 1893.

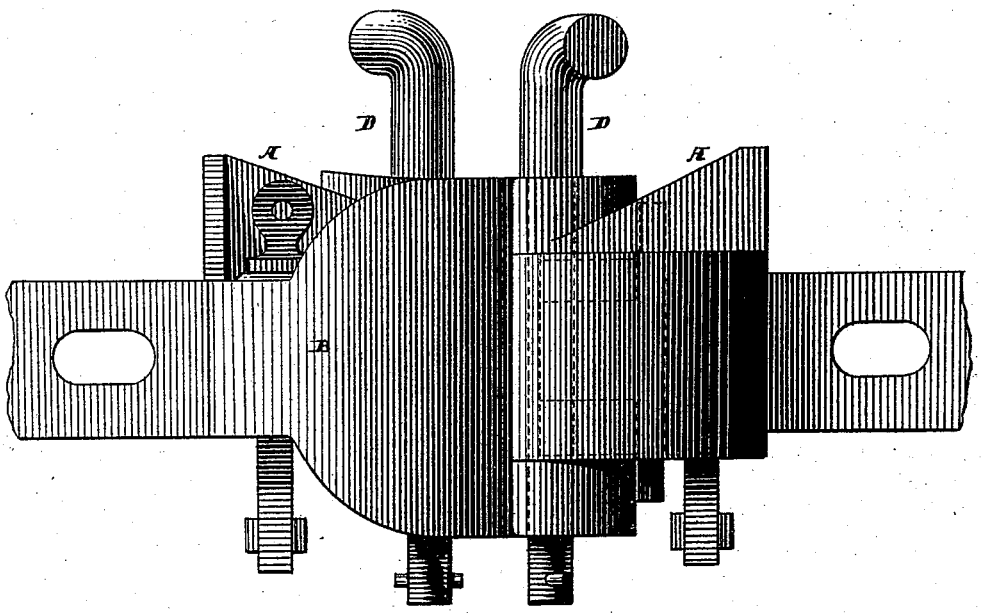

Fig. 1.

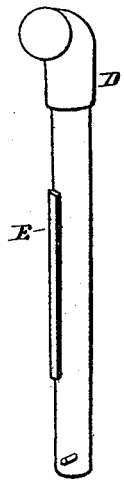

Fig. 3.

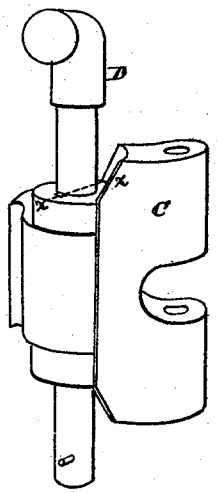

Fig. 2.

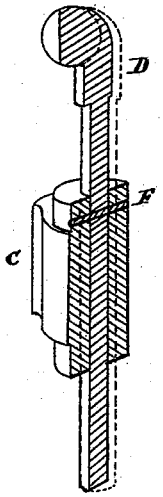

Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

ADAM TRAUTMAN, OF GALION, OHIO, ASSIGNOR OF TWO-THIRDS TO ARTHUR W. BALL AND C. A. ALLEN, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 490,604, dated January 24, 1893.

Application filed November 1, 1892. Serial No. 450,636. (No model.)

To all whom it may concern:

Be it known that I, ADAM TRAUTMAN, a citizen of the United States, residing at Galion, in the county of Crawford and State of Ohio, have invented a certain new and useful Improvement in Car-Couplers, of which the following is a specification.

My invention has relation to improvements in that class of car couplers known as "vertical plane" couplers, and in which the draw-head embodies a curved guard-arm and a rocking knuckle arranged to swing inside of the guard-arm of the coupler and interlock with the knuckle of an opposite draw-head. In operation it is found, that with all care, these draw-heads become detached from the car, and fall upon the track, and present a dangerous obstacle to other passing cars.

The object of my invention is, by a simple and effective device, to prevent these draw-heads from falling, when detached from the car, and to sustain them by the draw-head of the car with which they may be connected.

To the aforesaid object, my invention consists in the peculiar and novel construction, arrangement and combination of parts hereinafter described and then specifically pointed out in the claims, reference being had to the accompanying drawings, forming a part of this specification.

In the accompanying drawings, in which similar reference letters indicate like parts in the different figures; Figure 1, is an elevation of two couplers united, and embodying my invention; Fig. 2, an outline perspective of a knuckle and hinge pin, illustrating one method of connecting the two; and Fig. 3, a similar view of the hinge pin removed; and Fig. 4, a vertical section of Fig. 2, at the line X, X, illustrating a different method of connecting the pin and knuckle.

As my invention is applicable to any coupler of the class designated, I have adopted for the purpose of illustrating its application a form known as the Janney coupler.

Referring to the drawings, A, A, are the draw-heads, and B the curved guard-arm of the right coupler; the knuckles C, (Fig. 2,) are hinged to these draw-heads by hinge-pins D; the knuckle of the left draw-head being indicated in Fig. 1 by dotted lines. The upper ends of these hinge-pins are bent at a right angle with the body, and are so arranged that they will turn with their respective knuckles when the latter are rocked, in such manner that when the latter are rocked inward to interlock with each other in making the coupling, their horizontal portions will be above and overhang the guard-arm of the opposite coupler. Hence it will be apparent that if either coupler becomes detached from its car; as its descent must be vertical, and parallel with the contiguous faces of the draw-heads, the overhanging end of its hinge-pin will encounter the guard-arm of the opposite coupler, and its descent not only arrested, but it will be thereby supported, and prevented from falling on the track. To compel the hinge-pin to rock with the knuckle, I have suggested two forms of construction shown in Figs. 2, 3, and 4, respectively.

In the form shown in Figs. 2, and 3, the hinge-pin has a feather E, which fits a corresponding feather groove in the opening of the knuckle C; and in the construction shown in Fig. 4, the body of the pin is a plain cylinder, and is fastened in the orifice of the knuckle by a pin F.

I claim as my invention:

1. In a car coupler of the class designated, the combination with the knuckle, of a hinge-pin arranged to turn with said knuckle, and having a horizontally projecting end arranged to overhang the coupler of the opposite car when the couplers are locked, substantially as shown and described.

2. In a car coupler of the class designated, the combination with the knuckle, of a pin having a projecting end arranged to overhang an opposite coupler, and provided with means, as a feather, for causing it to move in unison with said knuckle, substantially as shown and for the purpose specified.

In testimony that I claim the above I hereunto set my hand.

ADAM TRAUTMAN.

In presence of—
J. W. COULTER,
ARTHUR W. BALL.