J. W. PAISLEY. CAR COUPLING.

No. 587,229. Patented July 27, 1897. John W. Paisley,

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JOHN W. PAISLEY, OF EAST RANDOLPH, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 587,229, dated July 27, 1897.

Application filed October 8, 1896. Serial No. 608,260. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. PAISLEY, a citizen of the United States, residing at East Randolph, in the county of Cattaraugus and 5 State of New York, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in

car-couplings.

The object of the present invention is to improve the construction of pin-and-link carcouplings and to provide simple and inexpensive devices adapted to be readily applied to a car and capable of enabling a link to be 15 guided into the mouth of a draw-head without going between cars.

A further object of the invention is to enable the operation of uncoupling to be readily performed from the tops and sides of cars

20 without going between them.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed 25 out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with this invention and shown applied to a car, the link-guider being in position for 30 directing the link into the draw-head. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the link-guider.

Like numerals of reference designate corre-35 sponding parts in all the figures of the draw-

ings.

1 designates a draw-head provided with a coupling-pin perforation and adapted to receive a link 2, which is engaged by a coup-40 ling-pin 3 in the usual manner. The coupextension 4, which passes through a slot 5 of a horizontal arm 6 of a vertically movable operating-rod 7, and which is secured to the 45 latter by a nut arranged on the upper face of the horizontal arm. The vertically-movable rod 7, which extends to the top of a car 8, is mounted in suitable guides 9, such as staples or the like, and it is angularly bent at a point 50 above the horizontal arm 6, which is located directly above the draw-head. The slot of the horizontal arm of the rod 7, which may l

be either tubular or solid, permits the necessary play of the draw-head, and when the rod 7, which is provided at its upper end with a 55 suitable handle, is lifted the coupling-pin is raised to disengage it from the link.

The operation of uncoupling is performed from the sides of the car by a pair of operating-levers 10, fulcrumed intermediate of their 60 ends in suitable brackets 11 and having their inner terminals located beneath the angularly-bent lower portion of the rod 7, whereby when either of the levers 10 is operated the rod 7 will be lifted to raise the coupling- 65 pin. The levers 10, which are adapted to be operated independently of each other, are provided intermediate of their ends with longitudinal slots 12, receiving the pivots 13 and permitting the levers 10 to be shifted longi- 70 tudinally a limited distance in order to vary the leverage and enable the operation of uncoupling to be easily performed from the sides of the car.

A link is directed into the mouth of the 75 draw-head during the operation of coupling by a link-guider 14, consisting of a substantially wedge-shaped or triangular head and a pair of inwardly or rearwardly extending shanks or bars 15. The link-guider, which 80 is located beneath the draw-head, presents an upper inclined face which is slightly rounded and which is adapted, when the link-guider is raised, as illustrated in Fig. 1 of the accompanying drawings, to form an incline imme- 85 diately in front and below the draw-head to direct a link into the same. The rear or inner ends of the shanks or bars 15 are provided with eyes formed by bending the terminals of the shanks or bars upward and per- 90 forating the same, and these eyes are arranged on longitudinal guides 16, arranged beneath ling-pin is provided at its top with a threaded | the car and permitting the link-guider a limited longitudinal movement to prevent it from being injured during the operation of coup- 95 ling. The guides consist of a pair of horizontal rods having their terminals bent upward and forming shanks which are secured to the draft-timbers of the car. The sides of the link-guider are adjustably connected by 100 chains 17 with the rod 7, whereby when the coupling-pin is raised the link-guider will be brought simultaneously in position for directing a link into the draw-head. The upper

terminals of the chains, which may, if desired, consist of a single chain, are secured by a fastening device to the arm of the rod 7, and the lower terminals of the chains are adjustably secured to the side bars or shanks of the linkguider by snap-hooks 18. The weight of the link-guider operates to hold the coupling-pin in position and to prevent it from being accidentally thrown out of the coupling-pin perforation of the draw-head during transit.

It will be seen that the car-coupling is exceedingly simple and inexpensive in construction, that it is positive and reliable in operation, and that it will enable cars to be uncoupled from their tops and sides without go-

ing between them.

It will also be seen that a link may be guided into the mouth of a draw-head from the top and sides of the car, thereby obviating the necessity of a person going between cars during the operation of coupling.

What I claim is—

1. In a car-coupling, the combination with a car, of a draw-head provided with a coupling-pin, longitudinal guides rigidly mounted beneath the car, a link-guider provided with a pair of bars or shanks slidingly connected with said guides and also adapted to swing upward and downward, operating mechanism connecting with the coupling-pin, and chains depending at opposite sides of the draw-head

and connecting the arms or shanks with the coupling-pin, whereby when the latter is raised, the link-guider will be lifted to a position at the front of the draw-head, substan-35 tially as described.

tially as described.

2. In a car-coupling, the combination of a car, a draw-head provided with a couplingpin, a vertically-movable rod having its lower portion angularly bent and provided with a 40 horizontal arm loosely connected with the coupling-pin, guides arranged beneath the car and disposed longitudinally thereof, a link-guider located beneath the draw-head and composed of a wedge-shaped head, and 45 a pair of bars or shanks mounted at their inner ends on the said guides, chains adjustably connecting the link-guider with the vertically-movable rod, and a pair of operatinglevers fulcrumed on the car, located at oppo- 50 site sides thereof and adapted to engage the angular portion of the vertically-movable rod, substantially as and for the purpose described.

In testimony that I claim the foregoing as 55 my own I have hereto affixed my signature in the presence of two witnesses.

JOHN W. PAISLEY.

Witnesses:

MELVIN O. PARKER, HENRY C. SEIL.