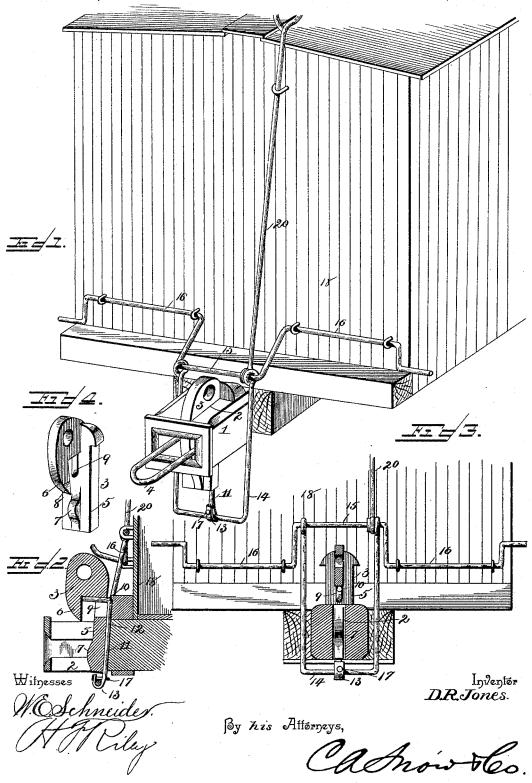
D. R. JONES. CAR COUPLING.

No. 491,562.

Patented Feb. 14, 1893.



## UNITED STATES PATENT OFFICE.

DOCTOR R. JONES, OF CREIGHTON, MISSOURI.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 491,562, dated February 14, 1893.

Application filed November 25, 1892. Serial No. 453,076. (No model.)

To all whom it may concern:

Be it known that I, DOCTOR RAY JONES, a citizen of the United States, residing at Creighton, in the county of Cass and State of Missouri, have invented a new and useful Automatic 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 simplify and improve the construction of car couplings, and to provide one capable of coupling automatically, and adapted to be readily uncoupled from the top and either side of a car without necessitating a person going between cars.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated 20 in the accompanying drawings and pointed

out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a car coupling embodying the invention. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the catch.

Like numerals of reference indicate corresponding parts in all the figures of the draw-

o ings.

1 designates a draw-head having a longitudinal link opening and provided with a vertical slot 2 T-shaped in horizontal section and forming a way for a catch 3 which is 35 slightly inclined, and which is adapted to be raised to release a link 4. The catch consists of a slide 5, and an integral hook 6 and is provided on the front face of the slide 5 with a boss 7. The hook is beveled at 8 to permit 40 it to be readily raised by a link entering the draw-head to make the coupling automatic; and the slide is provided at the mouth of the hook with a vertical slot 9 in which is arranged an arm 10 of a lifting bar 11. The 45 slot permits the catch to move independently of the lifting bar, so that the catch may be raised by the link without moving the lifting bar. The lifting bar is arranged back of a catch in a groove 12 of the draw-head, and its 50 lower end is bent on itself to form a hook 13, and is connected by an approximately rectangular link frame 14 with a loop or crank bend

15 of a rock-shaft 16. The link frame has its lower end detachably secured in the hook 13 by a removable pin 17, and the upper ends of 55 the sides of the link frame extend upward at opposite sides of the draw-head, and terminate in eyes which receive the loop or bend of the rock-shaft. The rock-shaft extends transversely of a car 18, and terminates at the sides 60 thereof in handles, to enable the catch to be lifted from either side of the car. The loop or bend of the rock shaft forms an arm and a rod 20 has its lower end provided with an eye and connected to the loop, and it extends 65 upward to the top of the car to enable the catch to be operated from that point.

It will be seen that the car coupling is simple and comparatively inexpensive in construction, that it is adapted to couple automationally, and that it may be readily uncoupled from either the top or sides of the car, and that persons are not required to go between cars.

I desire it to be understood that changes in the form, proportion and the minor details of 75 construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention. The slot 9 in the back of the catch allows the lifting bar to play up and down raising and lowering 80 the link to meet higher or lower cars at the will of the operator.

What I claim is—

1. The combination of a draw-head having a longitudinal opening and provided with a 85 vertical slot, a catch mounted in the slot of the draw-head and provided with a longitudinal slot, a lifting bar arranged longitudinally of the catch and extending below the same and provided at its upper end with an arm arranged in the slot of the catch, and means for raising and lowering the lifting bar, substantially as described.

2. The combination of a draw-head having

2. The combination of a draw-head having a longitudinal opening and provided with a 95 vertical slot T-shaped in horizontal section, a catch arranged in the slot of the draw-head and consisting of a slide and a hook and provided with a slot, a lifting bar arranged back of the catch and provided with an arm arranged in the slot of the catch, and means for raising and lowering the lifting bar, substantially as described.

3. The combination of a draw-head having

a longitudinal opening and provided with a vertical slot T-shaped in horizontal section and having a groove at the back thereof, a bend of the rock-shaft, and a rod extending 15 and having a groove at the back thereof, a catch mounted in the slot and consisting of 5 a slide and a hook and provided with a vertical slot, a lifting bar arranged back of the slide in the groove of the draw-head and provided at its upper end with an arm arranged in the slot of the catch, a rock-shaft arranged 10 transversely of the car and provided with a bend forming an arm, a rectangular link frame connected to the lower end of the lift-

upward from the end of the rock-shaft to the top of the car, 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.

DR. R. JONES.

Witnesses: M. O. JENKINS,

JOHN F. SIMS.