

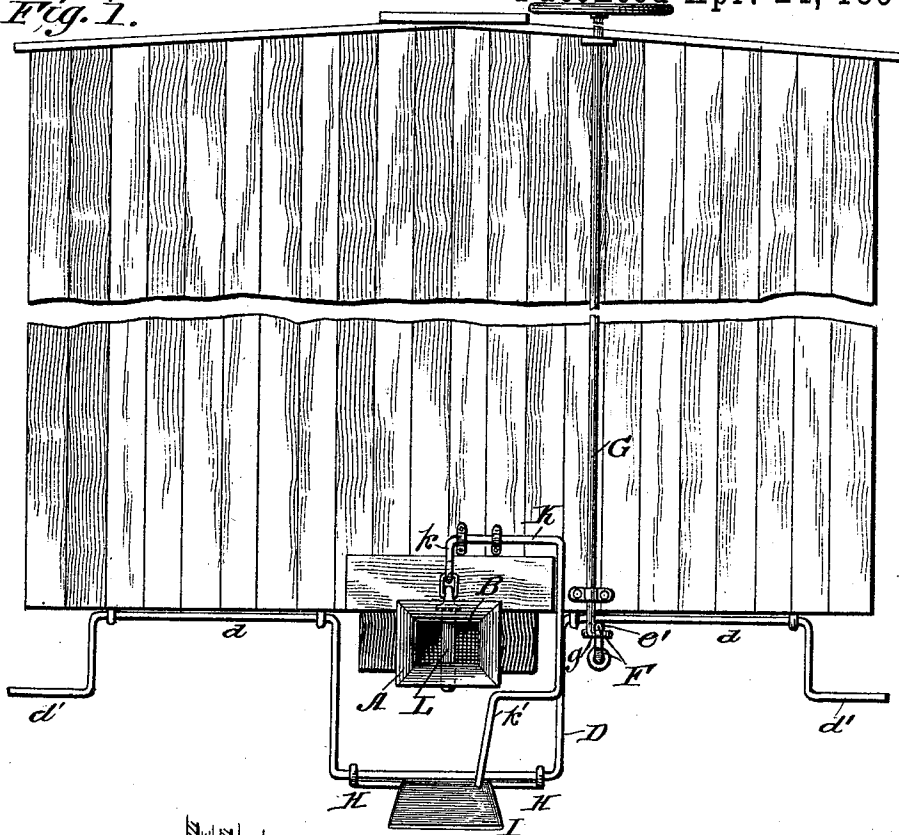
(No Model.)

J. COCHRAN, Jr.  
CAR COUPLING.

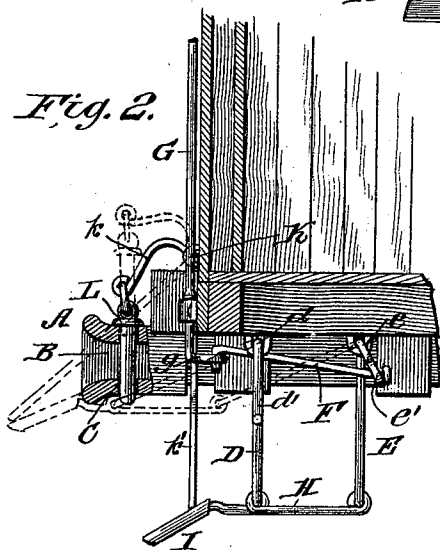
No. 518,832.

Patented Apr. 24, 1894.

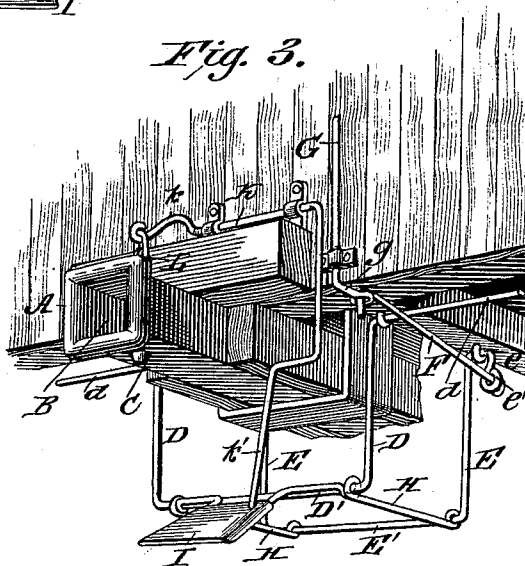
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Fred G. Deterich*  
*P.B. Surpin.*

INVENTOR

*John Cochran, Jr.*

BY

*Munn & Co.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN COCHRAN, JR., OF COLLINS, ASSIGNOR OF ONE-HALF TO SAMUEL F. HURT, OF STOCKTON, MISSOURI.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 518,832, dated April 24, 1894.

Application filed December 4, 1893. Serial No. 492,700. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN COCHRAN, Jr., of Collins, in the county of St. Clair and State of Missouri, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention is an improvement in car couplings and seeks to provide a simple novel construction by which the cars may be coupled from the side or top of the car without requiring the brakeman or other attendant to go between the cars while coupling and the invention consists in certain novel constructions and combinations of parts as will be hereinafter described and pointed out in the claims.

In the drawings—Figure 1 is an end view of a car provided with my improvements. Fig. 2 is a side view of the improvements parts being broken away and others shown in section. In this view the link lifter and the coupling pin are shown elevated in dotted lines. Fig. 3 is a detail view of the improved devices.

The drawhead A may be of the ordinary construction having the link mortise B and pin hole C and below this drawhead I arrange the pair of swinging bails. The front bail D and rear bail E have their shafts *d* and *e* suitably journaled so their cross bars *D'* and *E'* can swing back and forth, and the shafts of the front bail are extended and formed to provide crank handles *d'* by which the bail may be swung back and forth. The rear bail E is provided with a crank *e'* connected by a link or pitman F with a crank *g* on the shaft G which shaft G extends to the top of the car and has at its upper end a wheel or other handle so it may be turned at such point. By the described construction it will be seen that one bail may be swung from the top and the other from the side of the car and the said bails are so connected that the swinging of one will also swing the other. This connection between the bails is preferably the side rods or bars H extended between and fixed to said bails and extended forward beyond the front bail to support the link guide and lifter I which is in the nature of a plate fixed to the extended ends of rods H and inclining upward from front to rear and is movable by the swinging of the bails up to a point

in front of and inclining upward to the link mortise or back under the drawhead. When adjusted to its forward position the link guide operates as an incline up which a link in an approaching drawhead will be directed.

As before described the link guide may be adjusted back and forth from the side or top of the car it not requiring the brakeman or other employé to go between the cars at any time. The arrangement of the bails and their connections as shown and described causes them to move with a parallel motion the link guide moving back and forth and preserving its inclination throughout its movement.

To operate the pin by the movements of the link guiding devices I provide a shaft K journaled to the end of the car and provided with an arm *k* supporting the coupling pin L and with an arm *k'* having a portion extended into engagement with or into the path of the link guiding devices so that as the said devices swing forward and upward to position to guide the link into the drawhead they will at the same time lift the pin in said drawhead to permit the entering link to pass below it such pin dropping through and securing the link as the link guide is lowered. In the construction shown and as preferred the arm *k'* is arranged to rest normally upon the link guide so it will slide upon the said guide and be easily raised and lowered as desired.

In operation the bails form swinging parallel carriers which operate in parallel lines and swing the guide back and forth without changing its angle to the horizontal so that it will be presented properly to receive the approaching link.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car coupling the combination of the drawhead, the link guide arranged when adjusted upward to form an incline upon which to direct the link into the drawhead and the swinging parallel carriers for said link guide arranged one in rear of the other and connected together and to the link guide substantially as set forth.

2. In a car coupling the combination with the swinging bails arranged one in rear of the other of rods or bars connecting said bails and

extended in advance thereof and the inclined link guide supported by said extended ends substantially as set forth.

3. In a car coupling the combination with the swinging bails arranged one in advance of the other and provided with cranks of a shaft extended to the top of the car and connected with one of said cranks and the link guide substantially as set forth.

4. In a car coupling the combination of the drawhead the link guide the swinging bails arranged one in rear of the other and connected as described and provided with crank arms two of which extend to the opposite sides of the car, and the shaft journaled to the car and connected with one of the crank arms of the bails substantially as set forth.

5. The improvement in car couplings consisting of the drawhead, the front bail having its shaft extended to the sides of the car and provided with hand cranks, the rear bail having its shaft provided with a crank, the shaft journaled at the end of the car and extended to the top thereof and having a crank connected with that of the rear bail and the link guide and its support substantially as set forth.

6. The combination with the drawhead and the coupling pin of the link guide having

swinging supports and the pin support having an arm connected with the pin and an arm arranged for operation by the link guide all substantially as set forth.

7. The combination in a car coupling of a movable link guide and a movable pin support having an arm directly engaged with and operated by the link guide and means independent of said pin support for operating the link guide substantially as set forth.

8. The improved car coupling herein described consisting of the drawhead, the coupling pin, the front bail having its shaft extended to the sides of the car and provided with crank handles the rear bail having its shaft provided with a crank, the rods connecting the bails and extended in advance of the front bail and supporting the link guide, the end shaft journaled to the car and extended to the top thereof and having a crank arm connected with that of the rear bail, and a pin support having an arm connected with the pin and a second arm arranged for engagement and operation by the link guide all substantially as set forth.

JOHN COCHRAN, JR.

Witnesses:

JOHN P. GORDON,  
A. J. HUTTON.