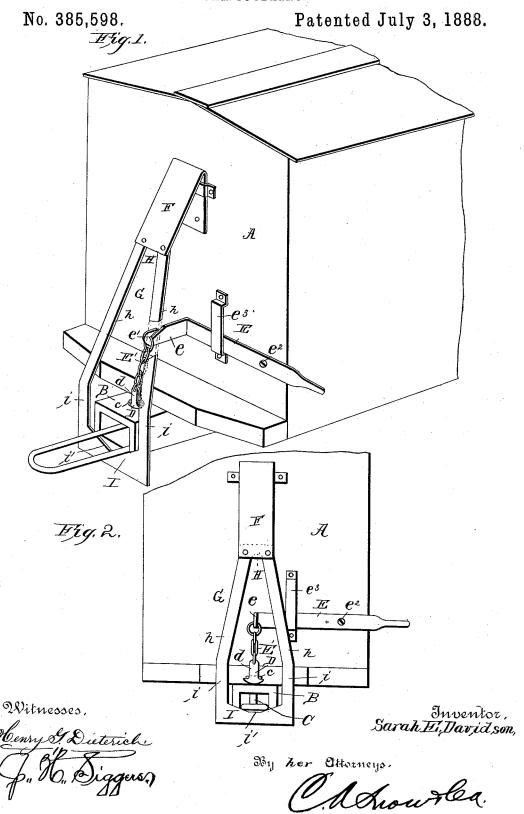
## S. E. DAVIDSON.

CAR COUPLING.



## UNITED STATES PATENT OFFICE.

SARAH ELIZABETH DAVIDSON, OF GLASGOW, KENTUCKY.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 385,598, dated July 3, 1888,

Application filed March 30, 1888. Serial No. 268,972. (No model.)

To all whom it may concern:

Be it known that I, SARAH ELIZABETH DA-VIDSON, a citizen of the United States, residing at Glasgow, in the county of Barren and State 5 of Kentucky, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

The invention relates to improvements in car couplings, being more particularly adapted to to freight and baggage cars; and it consists in the construction and novel combination of parts hereinafter described, illustrated in the drawings, and pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of the end of a car having a coupler embodying the invention attached. Fig. 2 is an end view of the same.

Referring to the drawings by letter, A des-20 ignates the end of a car having a draw-head, B, of ordinary construction attached.

C is the pin, having a head, c, preferably spherical, and having a metallic cap-piece, D, swiveled on its upper end and embracing the 25 head. To the vertical extension d of the cappiece the chain E' is attached by any secure means, the upper end of which chain is engaged to the hooked outer end, e', of the outstanding arm e of the lever E, which is pivoted 30 at  $e^2$  to the end of the car near one side, and has its inner arm held to the end of the car by the vertical guide-bracket e3, the ends of which are secured at proper points to the end of the car. The outer arm of said lever extends be-35 youd the side of the car, and its end is formed into a suitable handle for the use of the brakeman. Secured to the end of the car a suitable distance vertically above the draw-head is the reversed-U-shaped spring F, the outer arm of to which is free, the inner arm being firmly secured by any suitable means, such as bolts.

G is an iron stirrup depending from the end of the free arm of the spring, and consisting of the upper yoke-shaped portion, H, having the depending arms h, and the metallic plate I, having a central seat, i', for the link, and the upstanding arms i. All parts of the stirrup are integral. The spring is intended to hold

the seat-plate in such position that it will rest about under the middle of the link and hold 50 the same horizontal, so that when two cars come together the said link will enter the opposite draw-head.

In raising the pin the inner arm of the lever strikes against the upper part of the guide- 55 bracket and the pin is thereby prevented from being lifted from the draw-head.

In coupling, the brakeman, when the car with the link approaches, lifts the pin of the opposite car by the described means, and when to the link has entered lowers it again, engaging the link. The seat-plate will be driven by the impact against the draw-head; but the spring will again return it to its former posi-

Having described my invention, I claim—
1. In a car-coupler, the combination, with the draw-head, the link, and the pin, of the reversed-U-shaped spring secured to the car end a suitable distance vertically above the draw-head, and the stirrup secured to the free arm of said spring and consisting of the yoke and the metallic seat-plate, substantially as specified.

2. In a car-coupler, the combination, with 75 the draw-head, the link, the pin, and the pivoted lever connected by a chain to said pin, of the reversed-**U**-shaped spring and the stirrup secured to the end of the free arm of the spring, substantially as specified.

3. The herein-described car-coupling, consisting of the draw-head, the pin C, having the cap-piece D, the link J, the pivoted lever E, having the outstanding arm c, the chain E', connecting said arm and the cap-piece D, the 85 reversed-U-shaped spring, and the stirrup G, consisting of the yoke H and the seat-plate I, substantially as specified.

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

SARAH ELIZABETH DAVIDSON.

Witnesses:

J. L. WRIGHT, S. P. JEWELL.