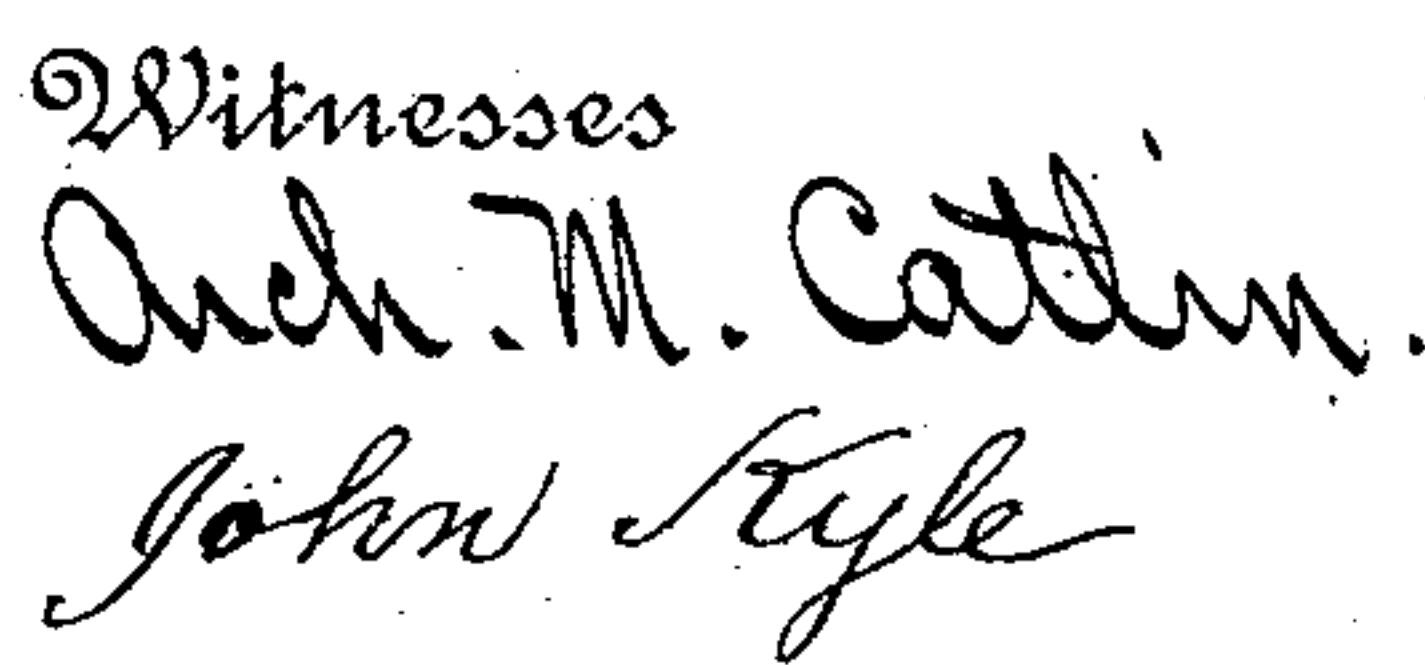


R. LOOMIS.  
CAR COUPLING.

Patented Dec. 27, 1892.



Inventor  
Reuben Loomis  
by Reij. R. Catlin Attorney



# UNITED STATES PATENT OFFICE.

REUBEN LOOMIS, OF BATAVIA, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 488,768, dated December 27, 1892.

Application filed October 26, 1892. Serial No. 450,033. (No model.)

*To all whom it may concern:*

Be it known that I, REUBEN LOOMIS, a resident of Batavia, in the county of Genesee and State of New York, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The invention relates to car couplers and has for its object means for sustaining the free end of a coupling link at various heights and for the convenient assemblage of the parts and their proper retention in operative position; and it consists in the construction hereinafter described and particularly pointed out.

In the accompanying drawings: Figure 1 is a plan, the top of one draw head being cut away; Fig. 2 an enlarged vertical central section. Fig. 3 is an enlarged section on line 3-3 of Fig. 1.

Numeral 1 denotes a pin-supporting rod or bar having bearings in the sides of the draw head, a rod and pin being provided in each head. The pin 2 is rigidly joined to the bar and the latter is provided on one or both ends exterior to the draw head with a crank arm 3 or equivalent device, whereby the rod can be turned to either swing the pin into position to engage a coupling link 4 or out of the plane of said link and into an inoperative position. The bar is situated just within the throat of the draw head and the pin is so proportioned that its free end will hang behind the shoulder 5 of the head when said pin is in a vertical plane or in position to engage a link.

To remove the pin out of the path of the link the latter is pushed into the draw head and the pin then swung back and up into a recess 8 formed in a removable block 6 secured in the top of the draw head. The link when engaged by the pin rests upon the shoulder 5 of the draw head mouth and when situated in its most forward position as shown in full lines in Fig. 2 bears by its rear end against the projections 7 formed on the underside of said block 6 and it is then supported in an approximately horizontal posi-

tion suitable for coupling with a corresponding draw head and pin. If the heads are about on the same level and approach each other sufficiently near the link being supported as stated, the pin of the opposite head can be swung down into said link and the cars coupled. This operation can be effected from any point at which the movement of the crank arm 3 can be controlled by levers, chains or other devices, as for example from the top of a car. In case the opposing draw head is below the level of that which carries the link the latter will strike the mouth of the draw head and be forced backwardly in manner to permit its rear end to be moved up into the recess 8' just back of projections 7, its front end falling to the level of the lower head and entering the same in proper position to receive the pin as before. Such lower position of the link is indicated by broken lines in Fig. 2. If the opposing draw head be the highest the link will be pushed up along the lower inclined wall of its mouth into coupling position.

To uncouple cars a pin is swung backwardly when the link has been pushed into the head sufficiently to permit such swinging movement.

The block 6 is made movable to provide for the convenient assemblage of the parts which result is also aided by the removable block 9. The blocks being detached the rod and pin can be entered at the side of the draw head and the journals of the rod placed in their bearings. The blocks being then replaced are secured in position. For this purpose the L-shaped bar 10 is suitable. 11 denotes fins formed on the upper side of the head which fins are provided with transverse openings to receive said bar which may be fastened in position by a key 12.

Having thus described my invention what I claim and desire to secure by Letters-Patent is:

1. The draw head provided with projections 7 and the recess 8 and the swinging pin in combination with a link adapted to be supported in the throat of the head and bear against said projections; substantially as set forth.

2. A draw head provided with projections

7, recesses 8 and 8' in combination with a link and pin; substantially as set forth.

3. A draw head having the removable blocks 6 and 9 and provided with a removable rod 5 and swinging coupling pin; substantially as set forth.

In testimony whereof I have signed this

specification in the presence of two subscribing witnesses.

REUBEN LOOMIS.

Witnesses:

BENJ. R. CATLIN,

ARCH. M. CATLIN.