

(No Model.)

G. H. HUTTENLOCHER.

CAR COUPLING.

No. 346,107.

Patented July 27, 1886.

Fig. 1

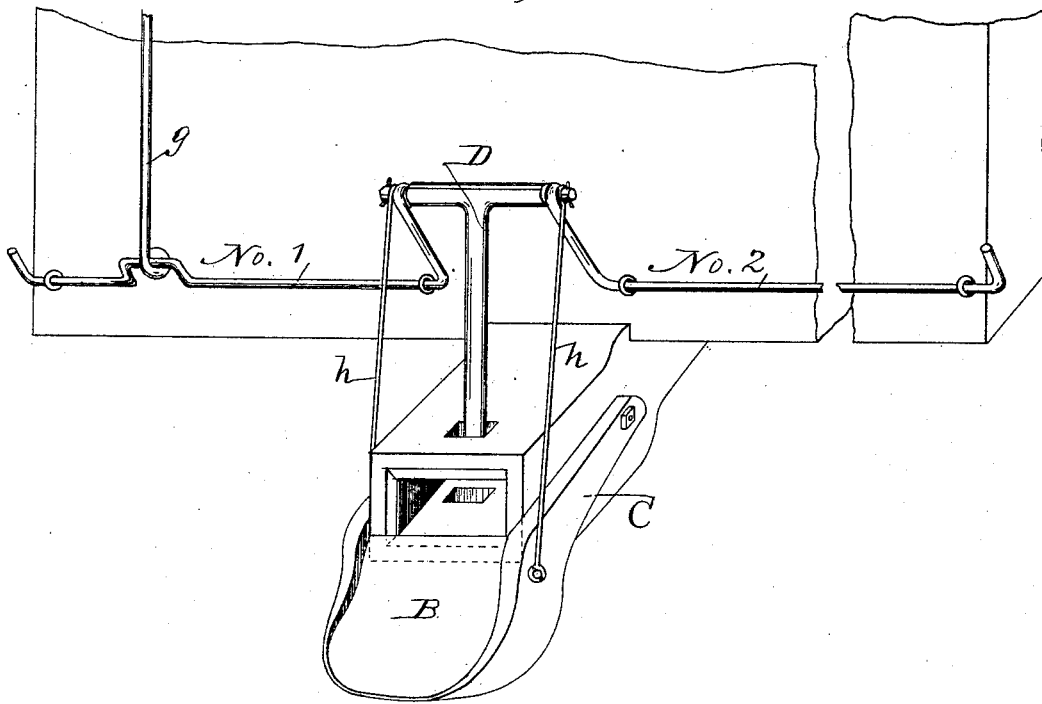
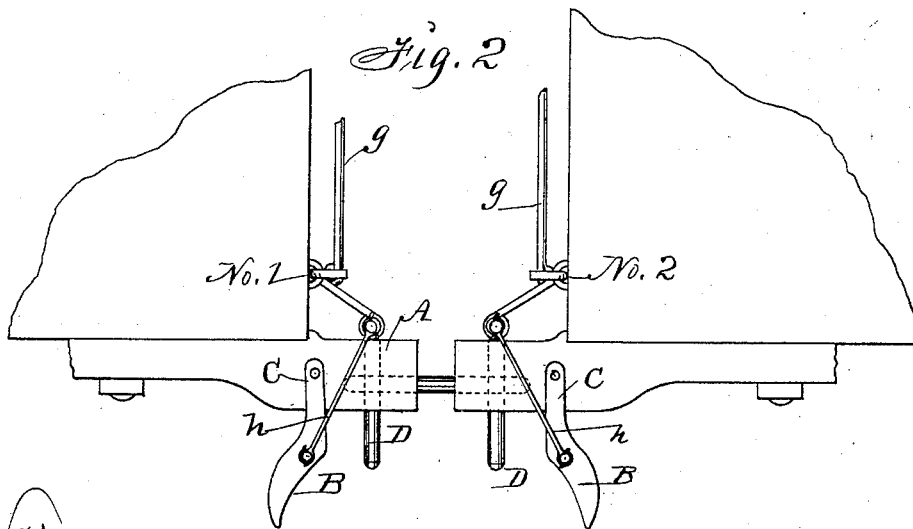


Fig. 2



Witnesses:

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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 346,107, dated July 27, 1886.

Application filed April 20, 1886. Serial No. 199,460. (No model.)

To all whom it may concern:

Be it known that I, GOTTLIEB H. HUTTENLOCHER, a citizen of the United States of America, and a resident of Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My improvement relates to devices that are designed to govern a coupling link and pin as required to couple and uncouple cars without exposing a hand, arm, or body between the cars.

Heretofore a plain-faced plate supported upon parallel bars has been combined with a draw-head and a single rock-shaft that extended across the entire end of a car, and a coupling-pin having a loop pivoted to its top in such a manner that the plate and pin could be simultaneously raised and lowered by means of the rock-shaft.

My invention consists in the construction and combination of a link-governing device of concavo-convex shape and a coupling-pin having a cross-head with a draw-bar and car, and two rock-shafts, as hereinafter set forth, in such a manner that a person at either side or on top of a car can readily govern a link of common form, as required, to direct it into the link-cavity of a draw-head, and to let a coupling-pin drop through the link, and also in such a manner that the coupling-pin will be depressed and retained in the link by the force of gravity of the link-lifting device, and also readily lifted by a person at the side or top of a car, as required, to uncouple.

Figure 1 of the accompanying drawings is a perspective view showing my device attached to a draw-head and the end of a car, as required for practical use. Fig. 2 is a side view representing two cars coupled together and the link-governing devices in pendent positions, as required to retain the pins in the draw-heads and link. Together they illustrate the construction, application, operation, and utility of my complete invention.

A represents a draw-head of common form fixed to a car by means of bolts, or in any suitable way.

B is my link-governing device, preferably cast complete in one piece, and pivoted to the

draw-head by means of a bolt, or in any suitable way, or to the car in such a manner that it will in its normal position hang immediately below the draw-head, and out of the way. It is in the form of a concavo-convex plate, that has arms C extending from its sides, and wide enough apart to admit the draw-head between them when the device is elevated to lift a link thereby. The curved surface of the plate is specially adapted to engage the rounded end of a coupling-link and to direct the link laterally as well as vertically relative to the mouth of the link-cavity and the coupling-pin, that is to pass through the coupling-link.

D is a pin that has a cross-head at its top.

Nos. 1 and 2 are rock-shafts in bearings attached to the car. They have cranks at their inner ends, which are flexibly connected with the cross-head of the pin D in such a manner that the pin can be readily lifted, when the shafts are jointly operated, by a person at the side of the car by means of a crank-handle on the end of the shaft, or by a person on top of the car by means of a crank, *f*, in one of the shafts, and a rope or cord, *g*, that extends up within reach. By thus combining two short rock-shafts direct with the cross-head of the coupling-pin no extraneous loop or connecting device is required, and the cross-head of the pin practically unites the two shafts, so that they can be operated jointly from either side of the car.

h h represent rods or chains, connected with the cranks on the inner ends of the crank-shaft or the cross-head of the pin, and the sides of the hinged or pivoted link-governing device, in such a manner that when the rock-shafts are turned toward the car they will simultaneously lift the pin, as required, to allow a link to enter the draw-head and the link-governing device to engage the free end of a link carried by a draw-head on another car, as required to lift the free end of the link and direct it into the vacant draw-head. As quick as two cars have come together, and the link carried by the one thus directed into the draw-head of the other, the operator can, by relaxing his hold, let the link-governing device and pin drop by force of gravity, as required to complete the coupling of the two

cars. To uncouple, I simply lift the pin by means of the rock-shafts connected with the cross-head of the pin.

I claim as my invention—

5 1. In a car-coupling, the combination of a pin having a cross-head and two rock-shafts having cranks on their ends, for the purposes stated.

2. The combination of the device B, having

arms C, the pin D, having a cross-head, the 10 rock-shafts Nos. 1 and 2, and connecting rods or chains *h* with a draw-head and car, to operate substantially as and for the purposes set forth.

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Witnesses:

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