(No Model.)

D. K. SLAWSON.

CAR COUPLING.

No. 515,305. Patented Feb. 20, 1894.

Fig. 1.

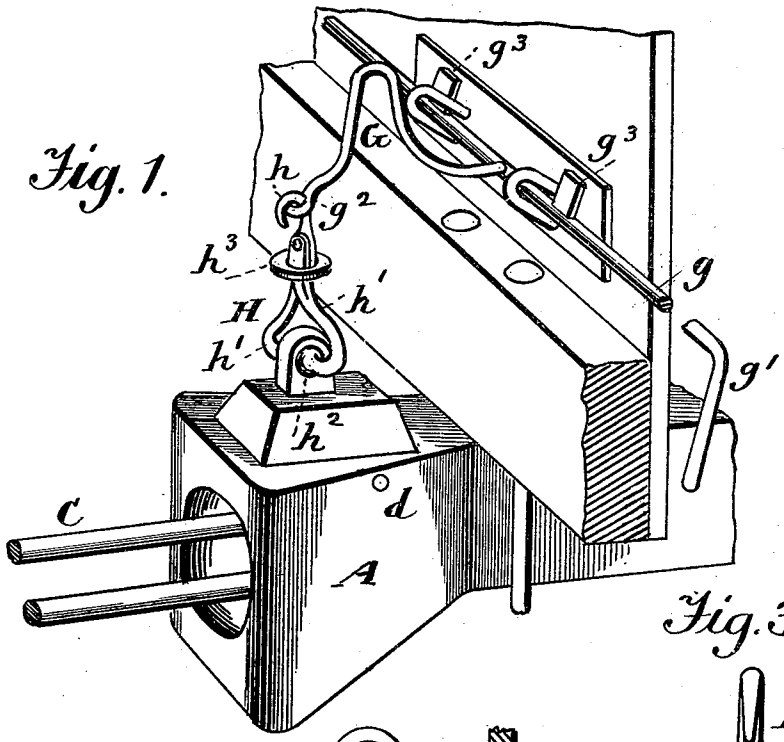


Fig. 3.

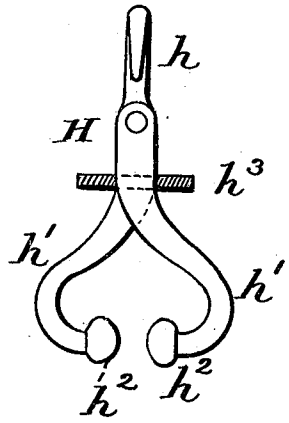
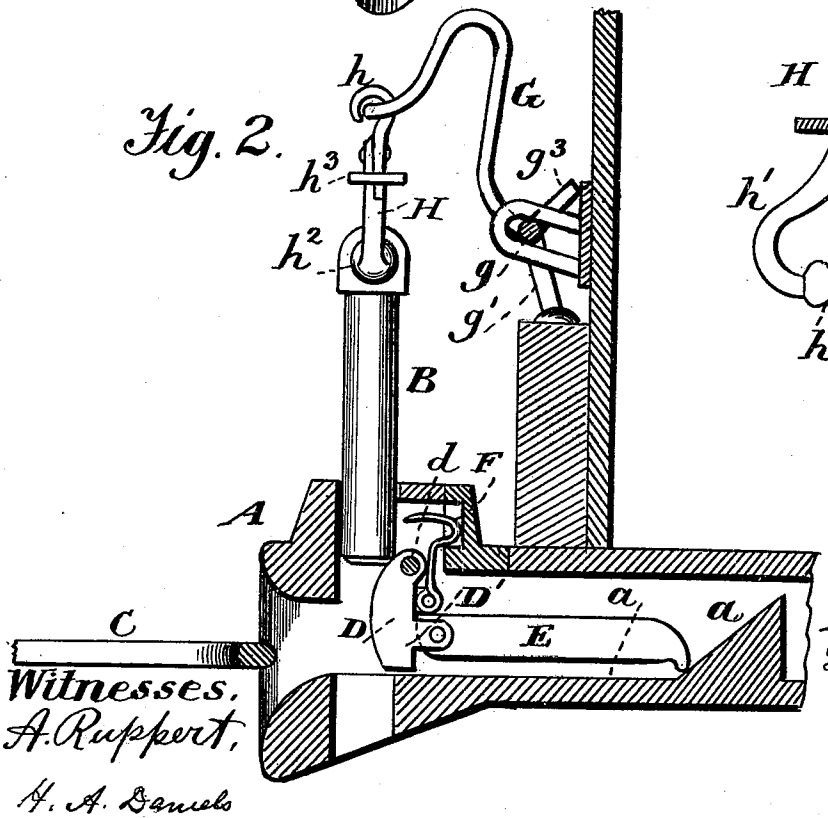


Fig. 2.



Witnesses.
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DANIEL K. SLAWSON, OF MANITOU, CANADA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 515,305, dated February 20, 1894.

Application filed July 15, 1893. Serial No. 480,622. (No model.)

To all whom it may concern:

Be it known that I, DANIEL K. SLAWSON, a subject of the Queen of Great Britain, residing at Manitou, in the county of Dufferin and Province of Manitoba, Canada, have invented certain new and useful Improvements in Car-Couplings; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The special object of the invention is to make a pin and link car-coupling which will couple automatically and uncouple from the car or either side thereof, without danger to life or limb.

The invention will first be described in connection with the drawings and then pointed out in the claims.

Figure 1 of the drawings is a perspective, showing the uncoupling mechanism on the car and connected with the pin; Fig. 2 a longitudinal vertical section, to show the coupling mechanism and the means by which the pin is supported until the link causes it to drop thereinto; Fig. 3 a detail view of the pin-grip.

In the drawings, A represents the drawhead with a flaring mouth, two vertical registering pinholes, and a rear channel whose bottom a rises on an incline toward the rear.

B is the coupling pin which may have two opposite indentations at the top or a lateral hole therethrough, and which is preferably made oblong or not round.

C is the coupling link and D the knuckle which is pivoted on a cross-pin d in the drawhead. On the back of the knuckle D, is pivoted a dog F which falls under and supports the pin before the knuckle assumes a perpendicular position, when the latter carries it back as shown in Fig. 2 of the drawings. The lower part D′ of the knuckle is struck by the front end of the link as its enters drawhead and pushed rearwardly to allow the pin to drop into the link.

E is a pusher pivoted to the back of the knuckle and below the pivot of the dog, and extending back to the incline a up which it is forced by the link C. There may be a lug or friction roller under the rear end of pusher, to lessen friction, or the under side of end may be curved upwardly. When the draft carries the link against the pin, the pusher slides down by its own gravity and takes a bearing on the link to hold it in position.

G is a crane and g a shaft preferably integral therewith, the latter having the arms g' g' one on each side of the car. On the front end of the crane is an eye g^2 engaged by the griphook h, while the lower end of the grip is provided with the cross-pivoted jaws h' h'. The shaft g turns in slotted bearings and has rear lugs g^3 g^3 to give it a changeable fulcrum, to allow the coupling pin to be drawn up perpendicularly. When the end-bulbs h^2 h^2 are pressed into the indentations of the pinhead, they are held there by the ring h^3 which slides down over the straight part of the jaws. By raising the crane, the pin is raised out of the link, the dog falls under it and the crane when let go, falls forward by gravity while the knuckle takes the place of dog in supporting the pin.

My car coupler will work with any ordinary pin coupler, cannot uncouple on curves or in snow and may be coupled or uncoupled by hand if the mechanism should chance to get out of order.

What I claim as new, and desire to protect by Letters Patent, is—

1. The pivoted knuckle D, pusher E and dog F combined in a drawhead to operate in connection with a pin and link substantially as described.

2. The crane G having a turn-shaft g with slotted bearings and rear studs g^3 g^3, in combination with the clutch H, to handle the coupling pin as set forth.

3. The combination with a top-pivoted, pin-supporting knuckle D, of a slide E pivoted to the rear thereof and an incline a up which the slide is carried by the link; whereby the knuckle will automatically return to a perpendicular position when the pressure from link is withdrawn.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL K. SLAWSON.

Witnesses:
W. F. ELLIS,
T. W. ALEXANDER.