(No Model.)

W. N. ROBINSON.

CAR COUPLING.

No. 473,346. Patented Apr. 19, 1892.

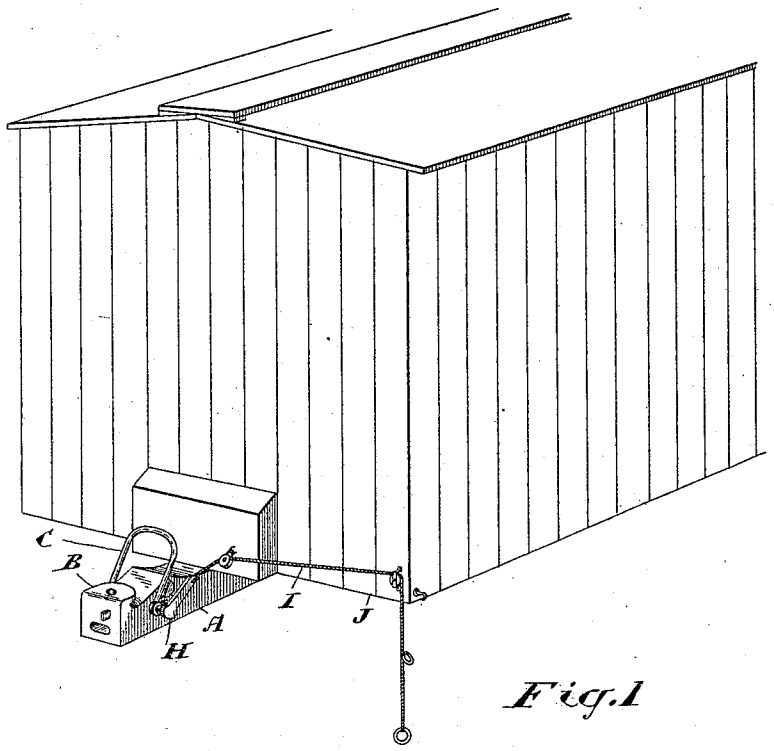

Fig. 1

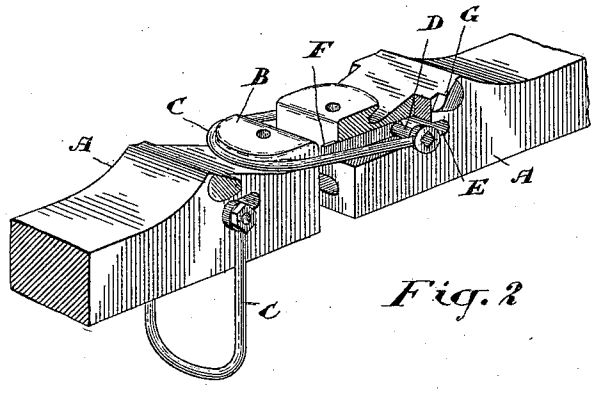

Fig. 2

Witnesses

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM N. ROBINSON, OF GALT, CANADA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 473,346, dated April 19, 1892.

Application filed October 22, 1891. Serial No. 409,526. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM NICHOLAS ROBINSON, of the town of Galt, in the county of Waterloo, in the Province of Ontario, Canada, have invented a certain new and Improved Automatic Car-Coupler, of which the following is a specification.

The object of the invention is to design a car-coupler which will couple automatically and may be uncoupled without the necessity of going between the cars; and it consists in the peculiar construction, arrangement, and combinations of parts hereinafter more particularly described and then definitely claimed.

In the accompanying drawings, Figure 1 is a perspective end view of a car provided with my improved coupler. Fig. 2 is an enlarged perspective view showing two of my improved car-couplers connected together.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the draw-head, connected to the car in any suitable manner and shaped in substantially the same form as the draw-heads now commonly in use, except in so far as it is necessary to alter it to suit the requirements of my invention.

B is a projection formed on top of the draw-head A, the inner portion of the said projection being curved to conform to the shape of the link C, pivoted on the other draw-head. I prefer, also, to recess the projection B on its rounded portion, so that there shall be a ledge, as it were, formed over the link C when it is in contact with the projection B.

D is a spindle, to which the link C is rigidly fastened in any suitable manner. This spindle D passes through an elongated horizontal hole E, made through the draw-head A, as indicated.

F is a bolt, one end of which is fitted upon the spindle D, its other end projecting through the face of the draw-head A. On each draw-head a shoulder or shoulders G is formed. The shoulders form a support for the link C when the said link is in a vertical position, as indicated in Fig. 1. When the link is in this position, the spindle D is against the front end of the hole E and the bolts F project through the face of the draw-head A. When the cars are to be coupled, one of the links is dropped below its draw-head, as indicated in Fig. 2, while the link on the opposite draw-head is set vertically, as indicated in same figure. When the two draw-heads come together, the bolt F is pressed in, thereby pushing the spindle D backwardly. When the said bolt has passed the shoulder G, the position of the center of gravity of the link relative to its bearing will be changed and the link C caused to drop down over the projection B, as indicated in Fig. 2, thus automatically connecting the two cars together.

H is a crank fixed to the spindle D.

I is a chain connected to the crank H and extending back to the car J. This chain may be carried through pulleys to the top of the car J, or it may be carried to the side of the said car, or, again, the said chain may be branched, one branch being carried to the side of the car and the other to the top, so that it may be pulled from either the top of the car or its side when it is desired to uncouple the car.

With the view of enabling a car provided with my improved coupler to be connected to a car of an ordinary link-coupler I form a mouth in the face of the draw-head A and pierce the said draw-head with a hole to receive an ordinary coupling-pin. From this description it will be seen that I not only provide an automatic car-coupler capable of being uncoupled without going between the cars, but I also secure one which may, when necessary, be connected to a car provided with an ordinary link or pin.

What I claim as my invention is—

A draw-head having a projection B and shoulder G formed on it, a spindle D, working in an elongated hole E in the draw-head and having a link connected to it, and a bolt F, connected to the spindle D and arranged to project beyond the face of the draw-head, in combination with a crank H, connected to said spindle D, and connections for operating said crank, substantially as shown and described.

Galt, August 14, 1891.

WILLIAM N. ROBINSON.

In presence of—

E. J. BEAUMONT,

W. BAIRD.