

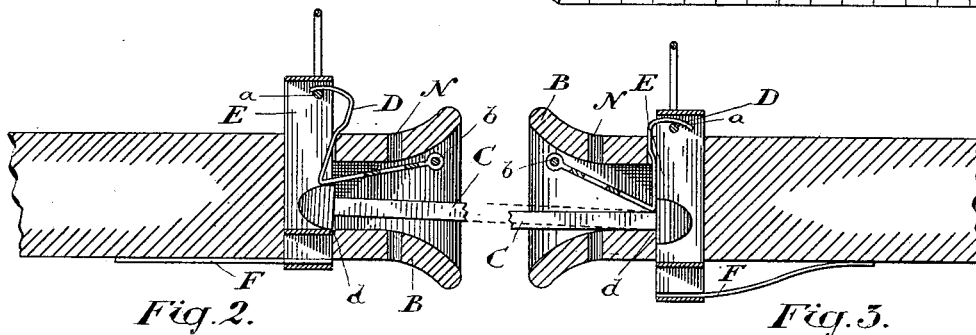
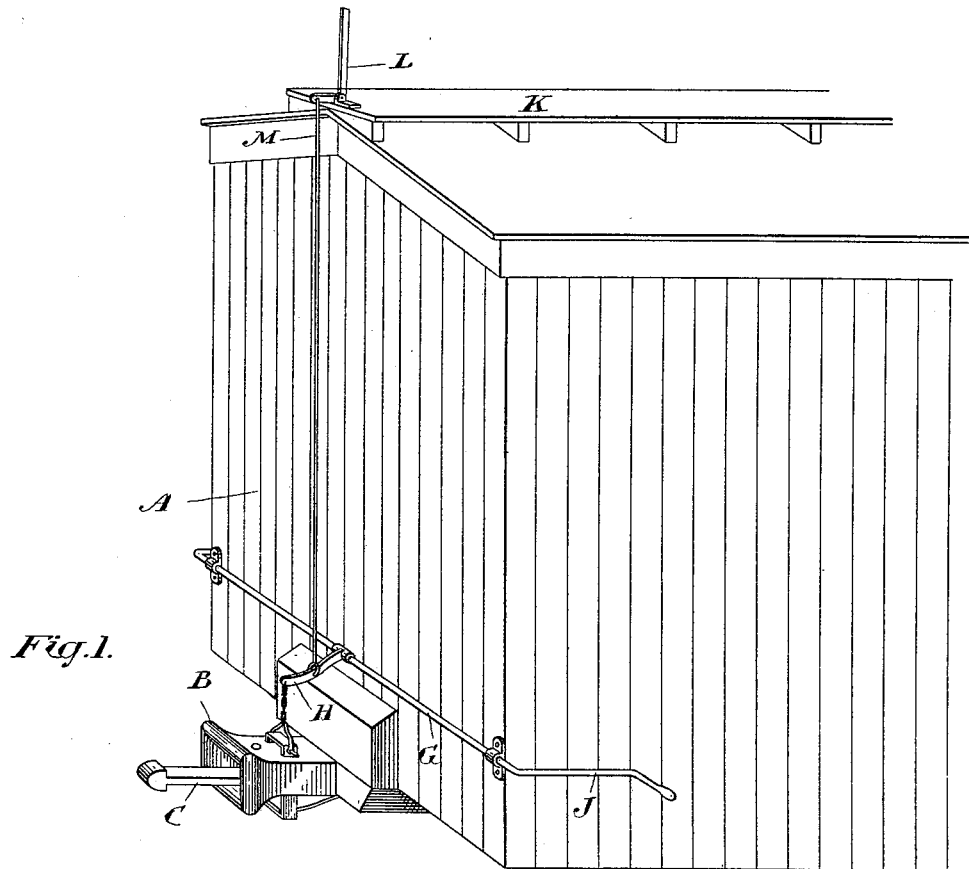
(No Model.)

J. T. HAUGH.

CAR COUPLING.

No. 386,818

Patented July 31, 1888.



Witnesses.

J. Edu. Mayber  
J. M. Jackson

Inventor.

John T. Haugh  
by Donald C. Ridout & Co  
Attys

# UNITED STATES PATENT OFFICE.

JOHN T. HAUGH, OF ESSA, SIMCOE COUNTY, ONTARIO, CANADA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 386,818, dated July 31, 1888.

Application filed December 24, 1887. Serial No. 258,894. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN THOMAS HAUGH, of the township of Essa, in the county of Simcoe, in the Province of Ontario, Canada, laborer, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification.

The object of the invention is to design a simple device by which a railroad-car coupler may be made automatic in its operation, so as to avoid the necessity for a brakeman or other railroad employé endangering his life by standing between the cars while they are being coupled; and it consists, essentially, in pivoting within the mouth of the draw-head a tongue bent to form a latch, and connected to a vertically-operating frame working in vertical slots made in the draw-head and actuated by a spring arranged to form the tongue into a spring-latch, which will automatically lock the coupling-link when it is inserted into the head, suitable appliances being provided by which the coupling link may be unlocked without any one endangering his life by entering between the cars, the whole being constructed and operated substantially as hereinafter more particularly explained.

Figure 1 is a perspective end view of a box-car provided with my improved car-coupler. Fig. 2 is an enlarged sectional elevation showing the coupling-link in the act of entering the draw-head. Fig. 3 is a similar view showing the coupling-link locked in the draw-head.

As the danger of coupling cars on railroads is now well recognized by the public, it is not necessary for me to point out all the advantages which will accrue by the adoption of a self-acting car-coupler, which, being applicable to all classes of cars and capable of being coupled with almost any style of coupler now in use, can be easily introduced and applied to all cars now in use.

In the drawings, A represents the end of an ordinary box-car, on which a draw-head, B, is connected in the usual manner. This draw-head may be made substantially in the shape now commonly used; but I do not confine myself to the exact design shown.

C is a double-ended arrow-headed link of a form which I think most suitable for my car-coupler; but it will be understood that an or-

dinary open link might be adapted to answer in its stead.

D is a tongue bent substantially in the form shown and connected to the vertically-operating frame E by passing over a horizontal pin, *a*, inserted in the frame E, as shown. The front end of the tongue D is pivoted at *b* near the mouth of the draw-head B. A spring, F, connected to the bottom side of the draw-head B, extends over the bottom bar of the frame E, and is set so that its tension shall hold the frame E down in the position shown in Fig. 3.

When the head of the link C is inserted into the head B, as shown in Fig. 2, it will naturally raise the inner end of the tongue D until the head of the link has passed the said tongue, when, by the action of the spring F drawing the frame down, the inner end of the tongue D will be forced down behind the head of the link C, the opposite side of the head of the said link C being forced down so as to project below the shoulder *d*, made in the draw-head B, as indicated. In this manner the link C will be rigidly held in the draw-head B until the frame E is raised, which action not only lifts the tongue D clear of the link C, but also, by its cross-bar *e* coming in contact with the bottom side of the head of the link C, raises the said link clear of the shoulder *d*, and thereby permits the said link C to be withdrawn from the draw-head B.

In order that the frame E may be raised vertically without entering between the car, I journal on the end of the car A a horizontal rod, G, and connect to it an arm, H, which is attached to the top of the frame E by the chain I.

Hand-cranks J are formed at either end of the rod G, so that the said rod G may be operated from the side of the car. I also pivot on the foot-board K a crank-lever, L, which I connect either directly to the frame E or to the arm H, as shown, by a rod, M, the said crank-lever being thus provided, so that the link may be released from the top of the car.

In order that my coupler may be connected to an ordinary coupler I make a hole, N, in the coupler, and also one in the tongue D, so that a pin may be inserted in the draw-head and used in the ordinary way.

I do not confine myself to the exact arrange-

ment of the rods and levers described, nor do I limit myself to the exact designs of the parts shown.

What I claim as my invention is—

- 5 1. A tongue, D, pivoted near the mouth of the draw-head B, and bent substantially as shown, so as to form a latch, as indicated, in combination with the vertically-operating frame E, carrying one end of said tongue and  
10 actuated by the spring F, substantially as and for the purpose specified.

- 15 2. A vertically-operating frame, E, having a cross-bar, e, formed in it, a spring, F, attached at one end to the underside of the draw-head and acting on said cross-bar, a tongue, D, pivoted at b near the mouth of the draw-head B, and bent substantially as shown, so as to extend over the pin a in the frame E, in

combination with the link C, arranged substantially as and for the purpose specified. 20

3. A vertically-operating frame, E, having a cross-bar, e, formed in it and actuated by a spring, F, a tongue, D, pivoted at b near the mouth of the draw-head B, and bent substantially as shown, so as to extend over the pin a 25 in the frame E, in combination with the link C and arm H, connected to the frame E and operated by the rod G, substantially as and for the purpose specified.

Signed at Alliston this 2d day of December, 30 1887.

JOHN T. HAUGH.

In presence of—

J. R. CULVERSON,  
GEO. MCGIRR.