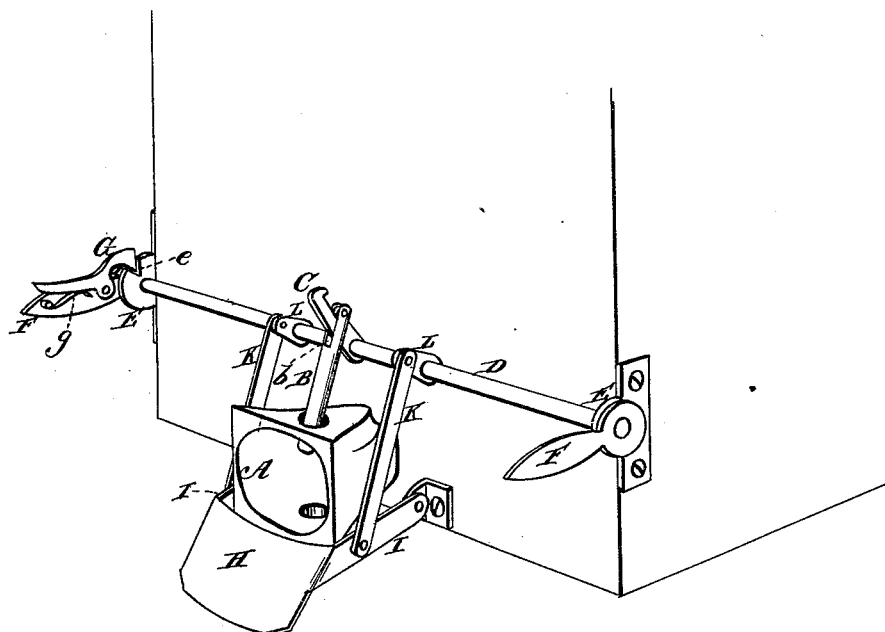


(No Model.)

H. C. WOFFORD.  
Car Coupling.

No. 229,511.

Patented June 29, 1880.



WITNESSES

*Robert Everett*  
*James J. Cheek*

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# UNITED STATES PATENT OFFICE.

HENRY C. WOFFORD, OF CLINTON STATION, SOUTH CAROLINA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 229,511, dated June 29, 1880.

Application filed May 15, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY C. WOFFORD, of Clinton Station, in the county of Laurens and State of South Carolina, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

The figure of the drawing is a representation of a perspective of my car-coupler.

My invention relates to a car-coupling; and it consists in the features of construction and combination hereinafter fully described, and particularly pointed out in the claim.

In the drawing, A designates the draw-head, and B the coupling-pin, which is formed at its upper end with a slot, *b*, for the reception of an arm, C. This arm is secured upon a shaft, D, which is journaled in the bearings E E, and provided at its ends with the hand-levers F. One of these hand-levers is provided with a pawl, G, which is acted upon by a spring, *g*, so that when the levers are raised the pawl will drop into a notch, *e*, in one of the bearings E.

H designates an inclined plate, which guides the link of a car into the draw-head. This plate or guide is hinged by the side bars, I I, to the car-body, and it is also hinged, by means of the bars K K, to the short arms L L upon the shaft D.

To uncouple the cars the brakeman raises one of the hand-levers. This movement consequently raises the remaining lever, vibrates the shaft D, draws the coupling-pin up through the draw-head, and also elevates the guide H,

all of which will be readily understood by bearing in mind the hereinbefore-described connection between the parts. After the levers have been thus raised and the coupling-pin drawn up a proper distance the pawl will be forced by the spring into engagement with the notch *e*.

In coupling, the link of a car strikes the hinged guide, which, while conducting the link into the draw-head, will be forced down, thus causing a movement of the several parts of the mechanism which is just the reverse to that above described.

The action of the link upon the hinged guide will be sufficient to cause a disengagement of the pawl from the notch, and to cause the coupling-pin to drop, in which it will be assisted by the weight of the pin and levers.

I do not confine myself, however, to two hand-levers, since one might be used, although two are preferable; also, I regard a weighted pawl as an equivalent for the spring.

What I claim, and desire to secure by Letters Patent, is—

In a car-coupling, the combination, with the draw-head A, of the vibratory shaft D, having arms C and L L, and hand-levers F, supported in bearings E, one of which is notched at *e*, spring-pawl G *g*, hinged arms I, hinged arms K, guide H, and slotted coupling-pin B *b*, constructed and operating substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY CARROLL WOFFORD.

Witnesses:

GEO. B. MCCRARY,  
R. Z. WRIGHT.