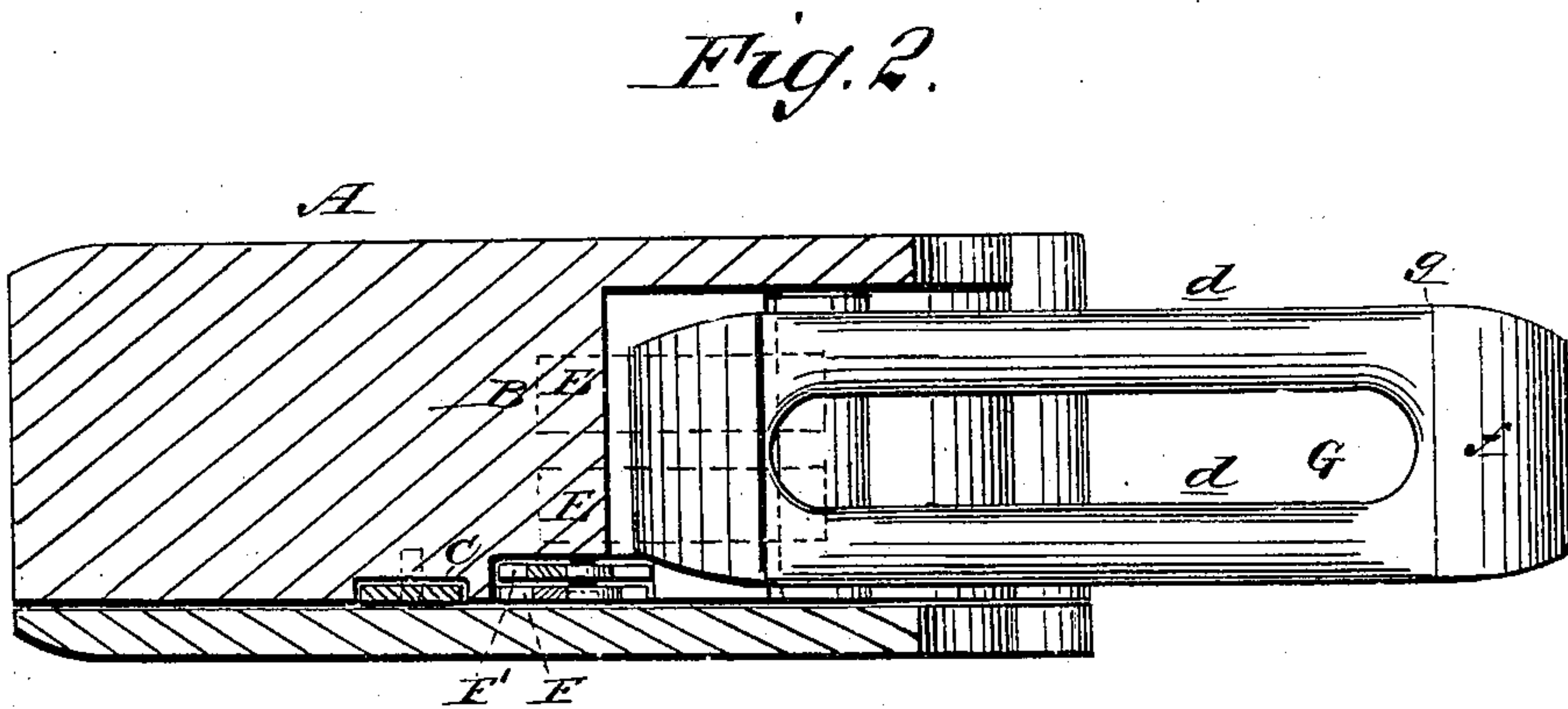
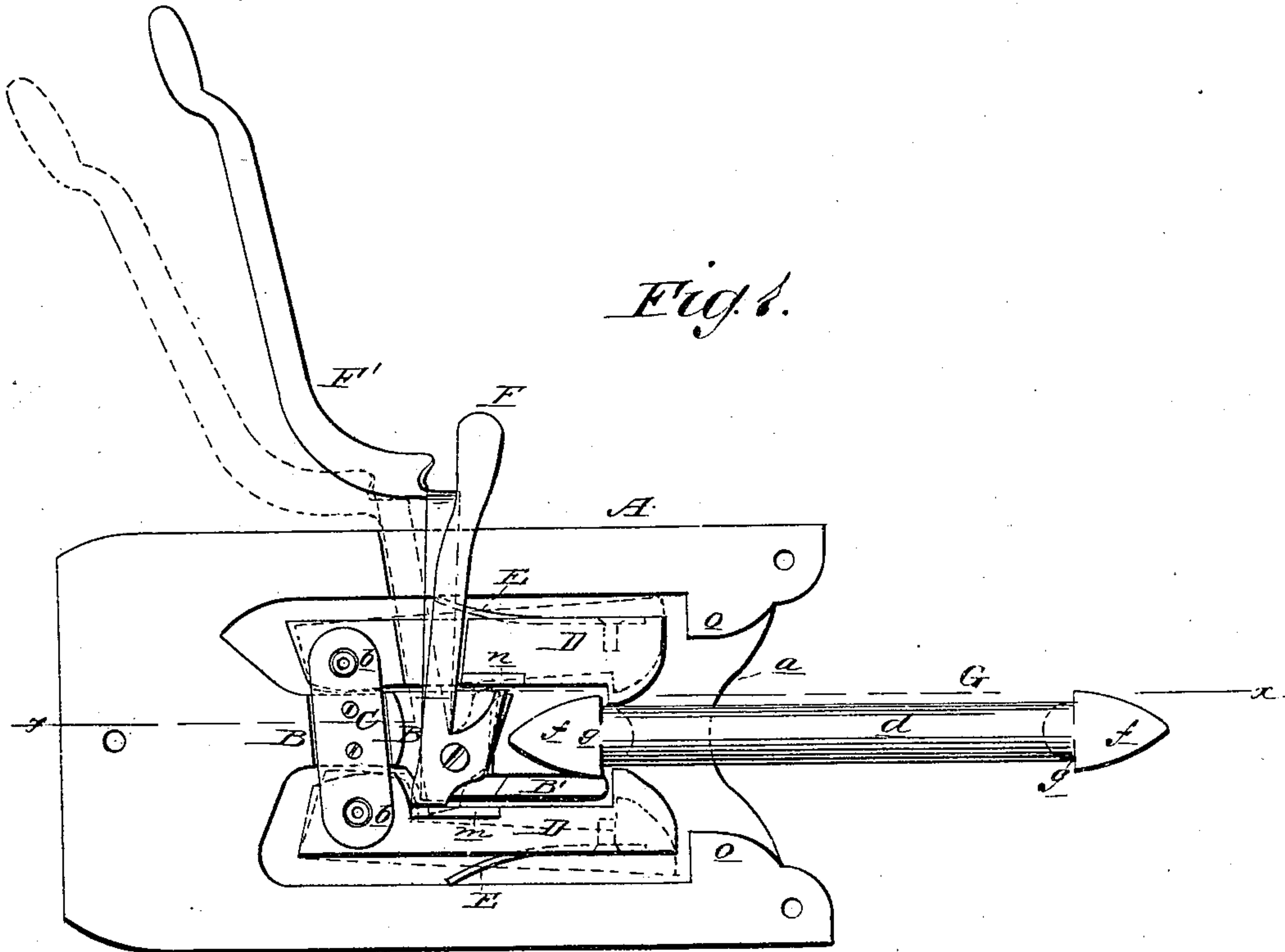


(Model.)

J. T. TODD.  
Car Coupling.

No. 236,649.

Patented Jan. 11, 1881.



WITNESSES:

Francis McAnally,  
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# UNITED STATES PATENT OFFICE.

JOHN T. TODD, OF CHRISMAN, ILLINOIS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 236,649, dated January 11, 1881.

Application filed November 1, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, JOHN T. TODD, of Chrisman, in the county of Edgar and State of Illinois, have invented a new and improved Car-Coupler, of which the following is a specification.

This invention relates to that class of couplers that are self-couplers; and it consists of a concave-faced draw-bar provided with interior upper and lower spring-actuated hooked jaws and suitable levers for opening them; and it consists, further, of a coupling-link having beveled ends.

Figure 1 is a side elevation of the device with a side of the draw-bar removed. Fig. 2 is a longitudinal section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the draw-bar, with a concavity, *a*, in its face, to allow the hand of the brakeman to guide the coupling-link G into its place, if necessary, without endangering his hand. A similar concavity, *a*, existing in an opposite draw-bar gives ample room for the hand when two cars come together.

In the hollow head of the draw-bar A is a fixed tongue, B, projecting forward centrally from the rear, to serve as a stop for the entering coupling-link G; and from the bottom of this tongue B a flat plate, B', projects still farther forward, to serve as a rest for the entered end of the coupling-link G.

On one side of the tongue B, at the rear part thereof, is secured a vertical plate, C, countersunk into the tongue, whose ends extend above and below said tongue B, and serve as supports for the transverse pins *b b*, on which are pivoted the parallel flat hooked pins D D, the one above and the other below the tongue B, and both extending across the hollow space in the said draw-bar A, with their hooked faces toward each other and their free ends extending nearly to the mouth of said draw-bar A. The jaws D D are held in place for grasping and holding a coupling-link by springs E E, that have ends secured to the upper and under sides of the upper and lower jaws, respectively, while their free ends engage against the top and bottom of said draw-bar A.

One side of the tongue B and the same side of the upper jaw D is recessed to permit the hooked levers F F', that are fulcrumed on the transverse screw or pin on the tongue B, to be flush with the sides of said tongue B and jaws D D, and to permit the lower ends of their shanks to rest on the wearing-plate *m* of the lower jaw D, while the points of their hooks extend upward against the wearing-plate *n* of the upper jaw D. The short lever F is for the convenience of the operator standing at the side of a car or on the platform thereof, while the long lever F' is designed to extend upward within reach of the operator on top of a car.

G represents the coupling-link, having straight side bars, *d d*, and enlarged beveled ends *f f*, as shown, whereby square shoulders *g g* are formed that serve as holding-points for the jaws D D. When a link, G, is entered into the mouth of the draw-bar A, being guided by the beveled lips *o o*, its beveled end *f* enters between the jaws D D, and forces them apart until the shoulder *g* of the said link G has passed in beyond the hooks of said jaws D D. Then the springs E E operate to close said jaws D D upon the link G, and thereby hold it coupled.

To uncouple, to release the link G, either one of the levers F F' is drawn back, causing the end of the lever-shank to bear upon the lower jaw D and the point of the lever hook to bear upon the upper jaw D, whereby said jaws D are opened for the liberation of said link G, the hooked end of the lower jaw D being pressed below the plate B', so that said link G may draw out from the draw-bar A without interference from the lower jaw D.

This device is especially adapted to box, stock, coal, and flat cars. On coal and flat cars the long lever F' may be dispensed with.

Cars provided with this improved draw-bar can be coupled, by this new link G, to cars having the old kind of draw-bars, as the opening in this new link will allow the pin of the old draw-bar to pass through, thus coupling a new and old draw-bar together by means of the improved link G.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—



1. A car-coupler, constructed substantially as herein shown and described, consisting of draw-bar A, provided with concave face *a*, for protecting the hand of the operator, with  
5 tongue and plate B B', for stopping and supporting the coupling-link, and with beveled lips *o o*, for guiding the entering coupling-link, hooked, pivoted, and spring-actuated jaws D D, for holding the coupling-link, lever  
10 F, for opening the jaws, and bevel-pointed and square-shouldered link G, as set forth.

2. The combination, with the tongue and pivoted spring-actuated hooked jaws D D, of the plate B', substantially as herein shown and described, whereby, when uncoupling, the  
15 coupling-link is prevented from catching on the lower jaw, as set forth.

JOHN THOS. TODD.

Witnesses:

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