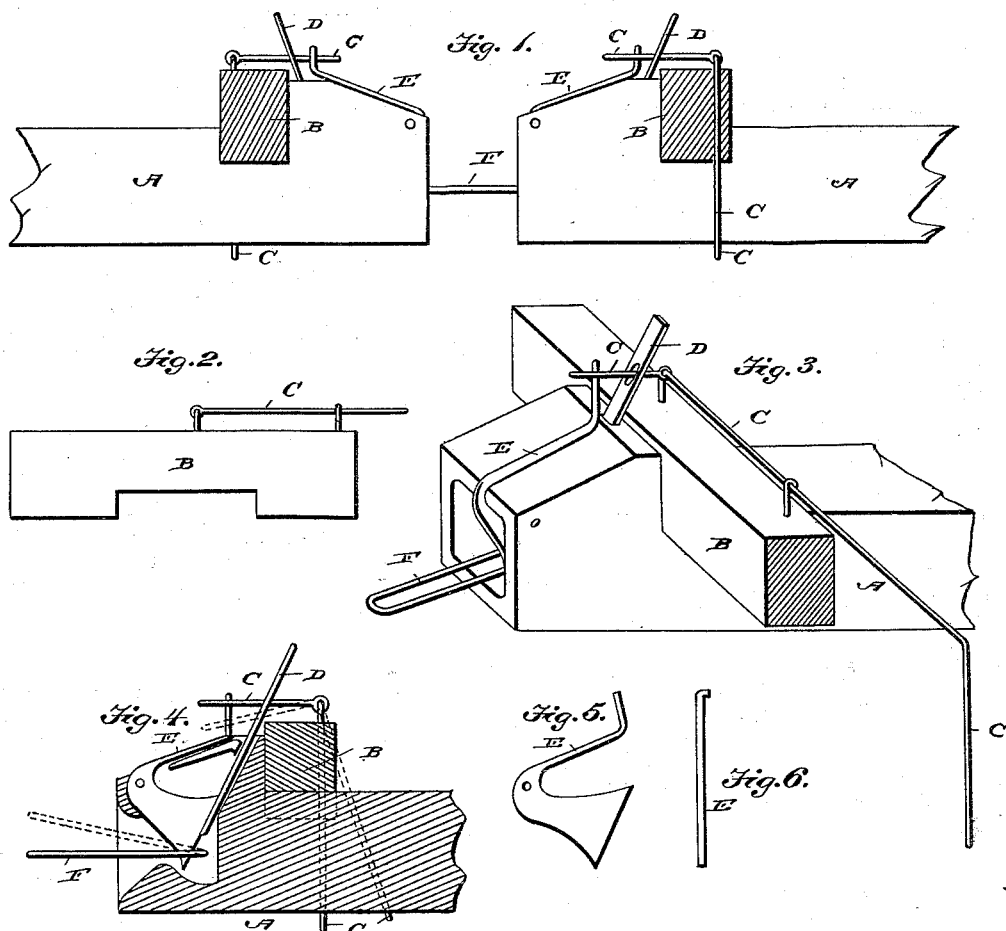


(No Model.)

L. E. FORD & A. J. WHITWORTH.
CAR COUPLING.

No. 421,920.

Patented Feb. 25, 1890.



Witnesses:

W. H. Ashwell
O. S. Dupin

Inventor:

L. E. Ford &
A. J. Whitworth.
G. W. R. Stringfellow
Attorney.

UNITED STATES PATENT OFFICE.

LEON E. FORD AND ALBERT J. WHITWORTH, OF McCOMB, MISSISSIPPI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 421,920, dated February 25, 1890.

Application filed December 16, 1889. Serial No. 334,005. (No model.)

To all whom it may concern:

Be it known that we, LEON E. FORD and ALBERT J. WHITWORTH, citizens of the United States, residing at McComb, in the county of Pike and State of Mississippi, have invented certain new and useful Improvements in Car-Couplers; and we 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.

Our invention relates to improvements in car-couplers, in which a lever placed within the openings of draw-bars are made to operate in conjunction with a link by means of a stay-bolt and a lever-rod adjusted to the dead-wood of a car; and the objects of our invention are to permit cars to be coupled or uncoupled from the side of the car, and thus avoid danger to brakemen. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view. Fig. 2 is a front end view of dead-wood. Fig. 3 is a perspective view of draw-bar with lever and link in position. Fig. 4 is a sectional view showing lever, link, and stay-bolt in position. Fig. 5 is a side view of lever. Fig. 6 is an end view of lever.

Similar letters refer to similar parts throughout the several views.

In constructing our invention the ordinary draw-bar can be used with slight modifications, as we use a lever, as shown by E, in preference to the ordinary coupling-pin. This lever is adjusted in the end of the draw-bar, as shown in Fig. 4, and is held in position by means of a pivot, or where desired the end of the draw-bar may be so constructed as to retain lever in position without the aid of a pivot.

D is a stay-bolt which is adjusted to lever-rod C, and when said lever-rod is actuated

causes stay-bolt D to be raised or lowered, thus enabling a pressure to be placed upon the end of coupling-link F, so as to place coupling-link at any desired angle that may be required in order to couple a car.

A are draw-bars.

B are pieces of timber placed at the end of freight-cars, and are known as "dead-wood" or "buffer-blocks."

The mode of operation is as follows: By simply pressing the lever-rod C from you the stay-bolt D descends upon end of link F, and raises same at an angle, as shown by dotted lines in Fig. 4, and permits link to enter the end of draw-bar, where it is held by lever E, and the cars are coupled. When it is desired to uncouple the cars, press lever-rod C toward you, and lever E is raised by means of lever-rod C coming in contact with projection on end of lever E, as shown in Figs. 5 and 6, and when lever E is thus raised the link F is released from the draw-bar of the car.

A striking advantage of our device is its simplicity and economical construction, enabling railway companies to utilize the couplers now in use upon freight-cars by dispensing with the coupling-pin and making a slight change in the end of the draw-bars.

Having fully described our invention, what we claim, and desire to secure by Letters Patent, is—

In a car-coupler such as described, the lever F, the stay-bolt D, for raising or lowering the coupling-link, in combination with lever-rod C and draw-bar A, as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

LEON E. FORD.

ALBERT J. WHITWORTH.

Witnesses:

MICHEL DECOURSEY,
PERCY D. PARKS.