

(No Model.)

D. DONAHUE.  
CAR COUPLING.

No. 495,315.

Patented Apr. 11, 1893.

Fig I.

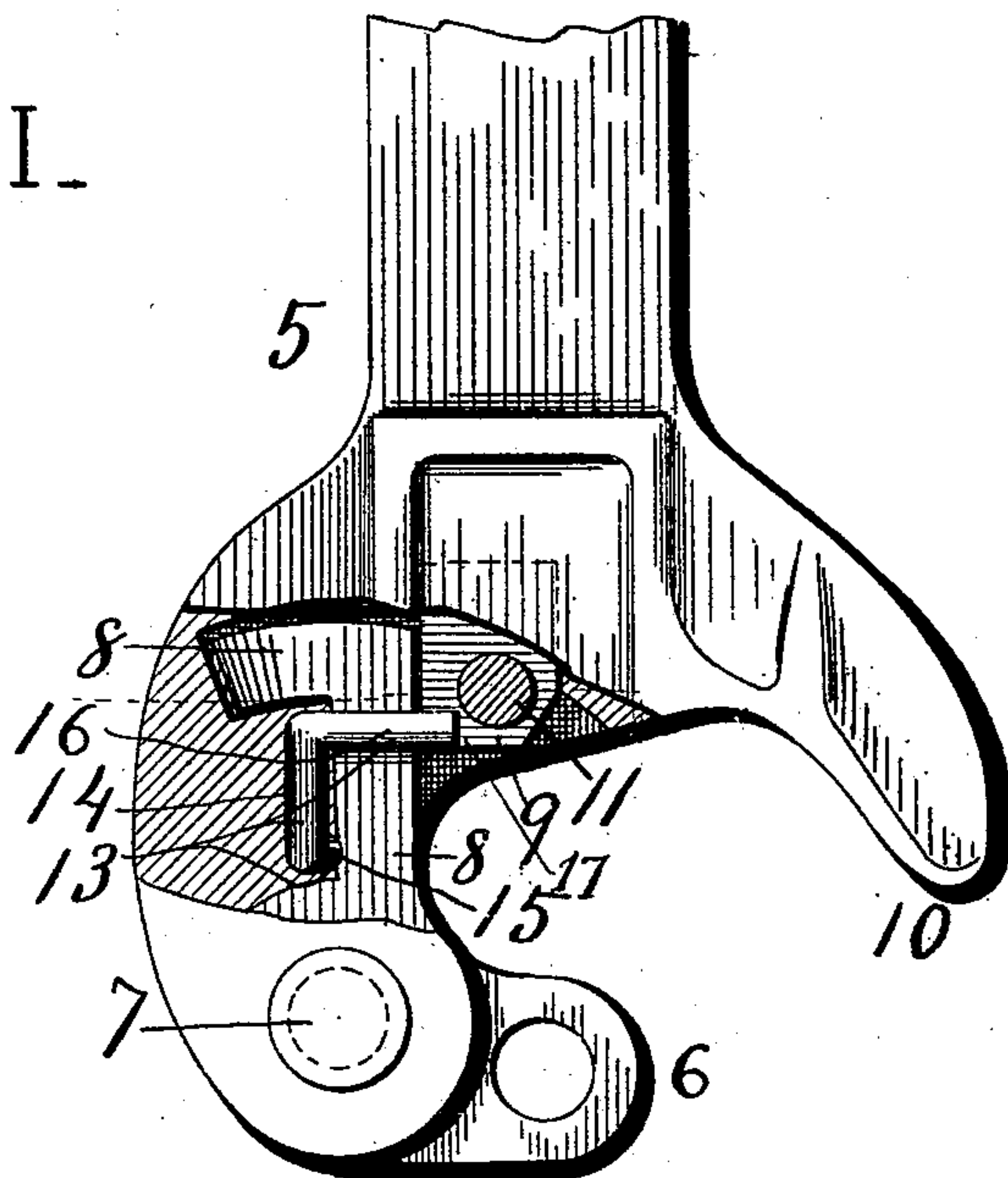
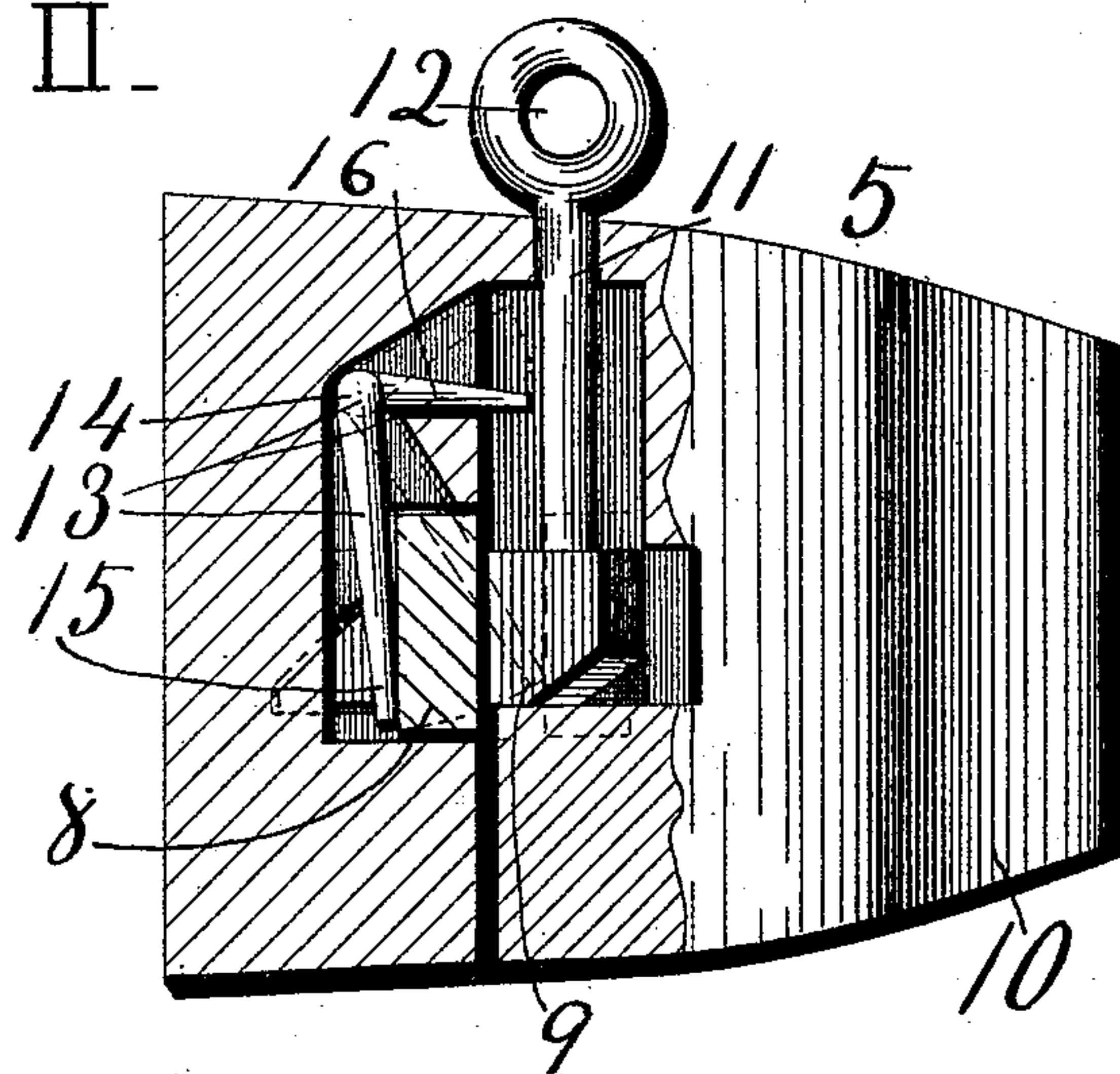


Fig II.



WITNESSES,  
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# UNITED STATES PATENT OFFICE.

DANIEL DONAHUE, OF BUFFALO, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 495,315, dated April 11, 1893.

Application filed June 10, 1892. Serial No. 436,227. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL DONAHUE, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Car-Couplings; and I do hereby 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.

This invention relates to car-couplings of the "twin hook" style, and its object is to provide means whereby the raising of the locking bolt will eject the coupling hook.

To this end my invention consists in the construction and combination of parts forming a car coupling, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure I, is a top view of one drawhead of a car coupling partly broken away to show my invention, with the coupling hook thrown open. Fig. II, is a front end view partly in cross section showing the relation of the parts with the hook closed.

5 represents the drawhead of a car coupling, and 6 a hook hung therein upon a pivot-pin 7. The hook is provided with a rear arm 8, and 9 is a latch or bolt fitted to slide vertically in the drawhead across the path of the arm 8, whereby the arm is locked in its rearward position when the hook is in position for service. All draw-heads are to be made exactly alike so that the hooks of two cars will engage each other to couple the cars, and each drawhead is provided with a flaring lip 10 to guide an incoming hook into the mouth and behind the hook of this head to couple the cars automatically. The first contact sides of the arm 8 and the bolt 9 have correspondingly inclined faces so that the act of swinging the hook back into place for service brings the two inclines together and wedges the bolt 9 up out of the path of the arm 8 until the arm has passed when the bolt gravi-

tates to place in front of the arm and locks the hook. The bolt 9 may be hung in any usual manner and be provided with any usual means for raising it out of the path of the arm, but I have shown a stem 11 attached to the bolt and passing up out of the drawhead, and provided with an eye 12 into which a chain or rod may be hitched whereby the bolt may be raised.

13 represents a tripper which is the main characteristic of this invention. It comprises a body portion 14 which is cylindrical and fitted to revolve in the drawhead; a vertical arm 15 adapted to act against the rear side of the hook-arm 8; and a horizontal arm 16 which extends into the path of the bolt 9, to be raised by the upper shoulder 17 of the said bolt, just at the time when the bolt passes up out of the path of the hook-arm 8. So by the act of suddenly withdrawing the bolt the hook is first released and then tripped forward or open into position to engage another hook. Then when the hook is returned to place the tripper is forced to act downward on the raised bolt and insures the instant locking of the hook thereby.

Having thus fully described my invention, what I believe to be new, and desire to secure by Letters Patent, is the following claim:

The combination in a car-coupling of a draw-head; a hook pivotally hung therein; a bolt hung to fall by gravity into the path of a portion of the hook, and a tripper hung upon a horizontal pivot and having one arm extending laterally over the bolt in the path thereof and another arm depending behind a portion of the hook, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL DONAHUE.

Witnesses:

W. KERNAHAN,  
ISAAC H. TAGGART.