

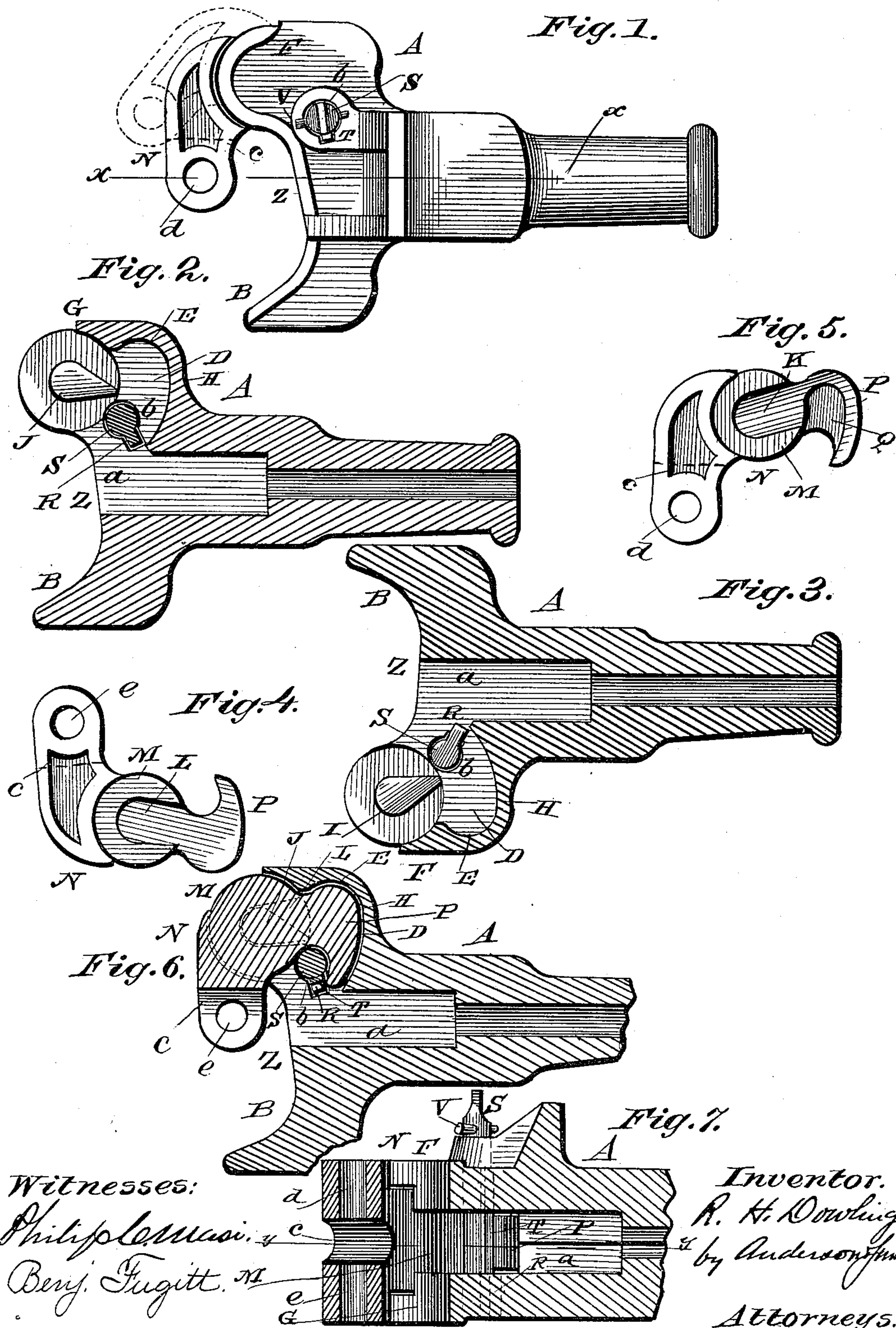
(No Model.)

R. H. DOWLING.

CAR COUPLING.

No. 379,888.

Patented Mar. 20, 1888.



Witnesses:

Philip L. Mason,

Benj. Fugitt.

Inventor.  
R. H. Dowling  
by Anderson & Smith

Attorneys.



# UNITED STATES PATENT OFFICE.

ROBERT H. DOWLING, OF NEWARK, OHIO, ASSIGNOR OF TWO-THIRDS TO  
CHARLES H. FOLLETT AND CHARLES FOLLETT, BOTH OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 379,888, dated March 20, 1888.

Application filed September 17, 1886. Renewed December 15, 1887. Serial No. 258,014. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT H. DOWLING, a citizen of the United States, and a resident of Newark, in the county of Licking and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and I 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a plan view. Fig. 2 is a view of the lower half in horizontal section. Fig. 3 is a similar view of the upper half. Fig. 4 is a bottom view of the jaw. Fig. 5 is a plan view of the same. Fig. 6 is a horizontal section on the line *y y*, Fig. 7. Fig. 7 is a vertical section on the line *x x*, Fig. 1.

This invention has relation to car-couplings, and is designed as an improvement upon the devices shown and described in the Letters Patent granted to me April 6, 1886, No. 339,156.

The invention consists in the construction and novel combination of parts, as hereinafter described, and pointed out in the claims.

Referring by letter to the accompanying drawings, A designates the draw-head, the shank of which is seated in bearings of the car in the usual manner.

At its front end the draw-head is laterally extended and terminates in a concave seat, Z, having at one side an integral outwardly and forwardly curved horn or guide-arm, B, and at the other side the upper and lower forwardly-extending lugs F and G, the front margins of which are circularly curved to form bearings for the concave curved shoulders of the movable claw N. The central longitudinal aperture of the draw-head opens at *a* in front, and in the enlarged front portion at the side opposite to the horn B communicates with a lateral recess, D, which is between the lugs F and G, as shown. The rear wall of this recess curves forward, and its outer or marginal portion, E, extends to the lugs F G and forms a bearing and stop for the back of the claw N.

The inner or opposing faces of the lugs F G are provided in front of the rear wall, H, of

the recess D with the bearing-lugs I and J, the rear portions of these lugs being of taper form and their front portions circular. These lugs engage U-shaped seats or recesses K L in the ends of the hub M of the movable claw N and serve as journals for said claw, whereby it is permitted to turn in its limited path of movement. The claw N is designed to be readily detachable from its seat in the head of the draw-bar. Its hub M is provided with a rearwardly-extending hook, P, which is recessed at Q in its upper face to form a seat for the lower end of the locking-pin S. This pin S is provided with a longitudinal rib, T, having a stop or projection, R, near its lower end, which is designed to prevent said locking-pin from being lifted out of its seat in the draw-head. This locking-pin S is introduced into its bearings *b b* in the draw-head from the lower side, and is provided near its upper end with a removable cross-pin, V, which prevents it from falling through the bearings in the draw-head. The rib T prevents the locking-pin from turning in its seat, said rib engaging offsets of the bearings *b b*.

The locking-pin is attached at its upper end to a rod or other connection, which extends to the top of the car, or to such other position above the platform as to be within convenient reach.

By means of a transverse operating-rod extending from the side of the car and having crank ends the locking-pin can be operated without going between the cars, when advisable. The hinged claw N is provided with a link-notch, *c*, in its front end, and pin-holes *d e* above and below said link-seat, for the reception of an ordinary coupling-pin when it becomes necessary to couple with the link and pin to a draw-head of common form.

In putting the coupling together the claw is first placed in its seat in the draw-head. The locking-pin is then passed up through its bearings, and the cross-pin is afterward inserted in place through the upper end of the pin to prevent the latter from falling out. When the locking-pin is down, it engages the hook P at the rear end of the claw-hub, and thereby the claw is held in its inner or engaged position. In order to loosen the claw, so that it can be turned outward to receive the claw of the draw-



head to be coupled thereto, the locking-pin is raised until it is stopped by the projection of its lower end. The claw can now be turned to its outer position to receive the claw of the opposite draw-head. After the latter has entered in position in the concave seat Z the claw is moved inward and engages the claw of the opposite draw-head, the locking-pin being dropped to secure the coupling.

10 Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the draw-head having a horn or guide-arm at one side of its laterally-extended head and a recess between lugs at the other side, of the movable claw provided with a recessed hub having a rear hook and a ribbed locking-pin formed with a stop near its lower end, substantially as specified.

20 2. The combination, with a draw-head having a concave front face provided with a horn or guide-arm at one side and bearing-lugs

having at the other side tapering bearings on their inner faces, of a movable claw having recesses in its hub portion to engage the tapering bearings, and having a rearwardly-extending hook and a locking-pin having a stop, substantially as specified. 25

3. The combination, with a recessed draw-head having the tapering bearings, of the movable claw having U-shaped recesses and a recessed hook, and the ribbed locking-pin provided with a stop and removable cross-pin, substantially as specified. 30

4. A draw-head having a detachable claw and reciprocating locking-pin engaging a recessed hook of said claw, substantially as specified. 35

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

ROBERT H. DOWLING.

Witnesses:

F. A. LOOR,  
JOHN DAVID JONES.