

(No Model.)

J. H. CONN & O. C. PUGH.
CAR COUPLING.

No. 386,915.

Patented July 31, 1888.

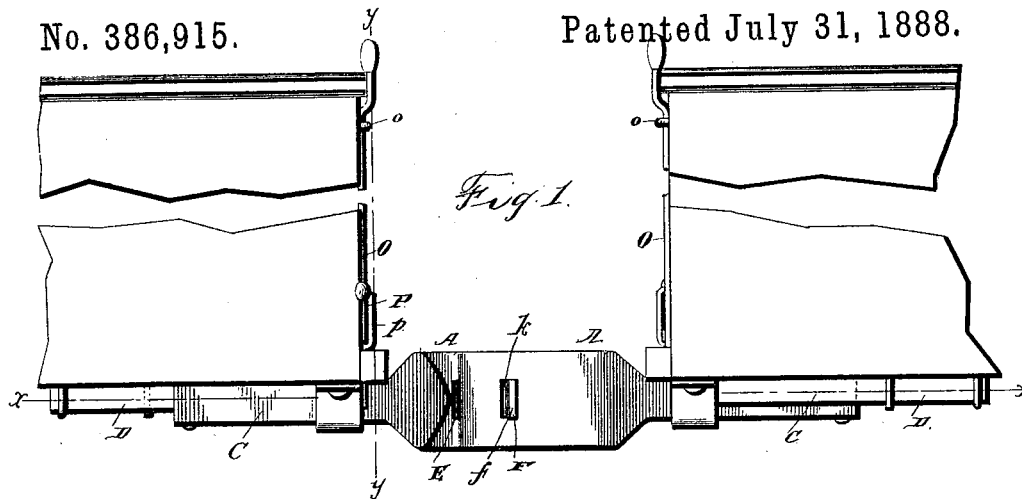
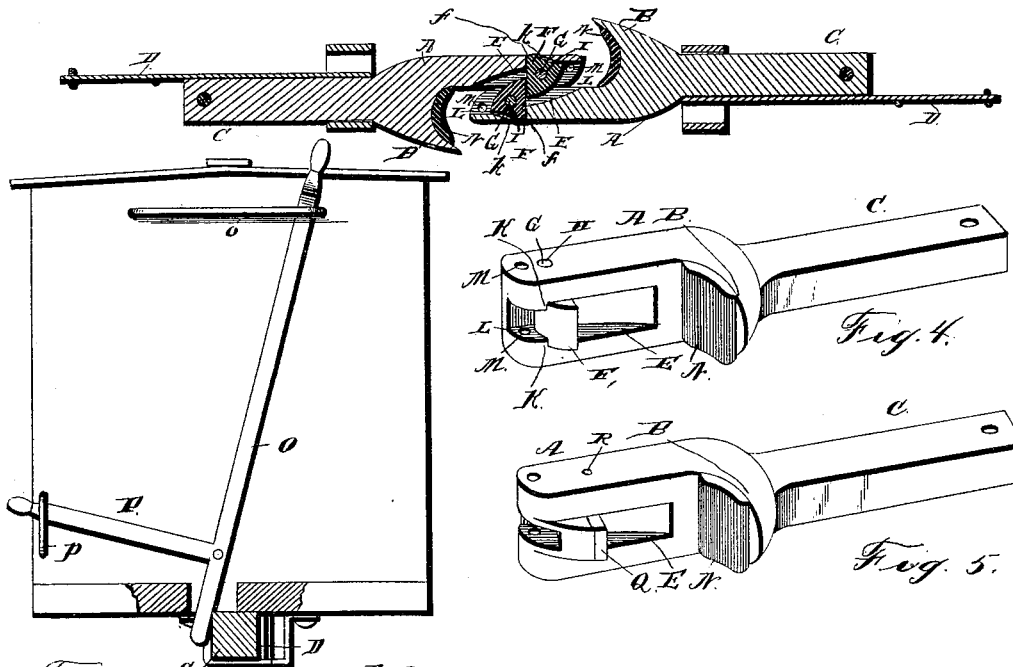


Fig. 1.



Witnesses:

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By their Attorneys.

C. H. Wood

UNITED STATES PATENT OFFICE.

JOHN H. CONN, OF ENGLEWOOD, AND OLIVER C. PUGH, OF CHICAGO,
ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 386,915, dated July 31, 1888.

Application filed February 11, 1888. Serial No. 263,702. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. CONN and OLIVER C. PUGH, citizens of the United States, residing, respectively, at Englewood and Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Car-Couplings, of which the following is a specification.

Our invention relates to improvements in car-couplings, and it has for its object to provide a simple, cheap, and durable coupler which may be very easily operated from either the top or side of the car.

The invention consists in a certain novel construction and combination of devices, which are fully set forth hereinafter, and specifically pointed out in the claim.

In the annexed drawings, Figure 1 is a side view of two couplers connected together. Fig. 2 is a horizontal section on the line *xx* of Fig. 1. Fig. 3 is a section on line *yy* of Fig. 1. Fig. 4 is a perspective view of one of the draw-heads detached. Fig. 5 is a similar view of a modified form of draw-head. Fig. 6 is a horizontal central section thereof.

Referring by letter to the drawings, A designates the draw-head, having a hook-shaped shoulder, B, near its rear end, and C designates a rearward-extending stem or neck, which is pivoted at its rear end to the car. A leaf-spring, D, presses against the side of the stem, and thus holds the draw-head pressed to one side—namely, toward the side having the hook-shaped shoulder. A beveled recess, E, is formed in the inner side of the draw-head, (namely, the side having the shoulder B,) and in the front end of the said recess is mounted a removable detent or dog, F. This detent or dog is beveled on its front side and is abrupt on its rear side, and it is capable of slight rotary movement on the bolt G, which passes vertically through the apertures H H in the draw-head and the bearing I in the detent or dog. The forward movement of this detent or dog is limited by the shoulders K K at the end of the recess E, and also by the tail *f* on the detent, which operates in an aperture, *k*, communicating with the recess E.

The end of the draw-head is provided with

a recess, L, having aligned openings M in its upper and lower sides adapted to receive a coupling-pin of the ordinary form.

N represents a rubber cushion or buffer, which is secured to the shoulder B, for a purpose to be described.

When two couplers approach each other, their inner faces come in contact and slide on each other, thus pressing the draw-heads laterally against the strength of the springs D'. The detents or dogs are depressed until they are almost flush with the contacting faces of the draw-heads, and after the detents or dogs pass each other the draw-heads are forced together by the said springs D and the detents or dogs engage each other. Obviously when the cars are drawn apart (as when they are in motion) the detents are turned on their pivots and pass well into the recesses E E, thereby obtaining a firm hold on each other. When the draw-heads come together, their ends strike against the rubber cushions or buffers on the shoulders B B and the shock is deadened.

O represents a lever, which is mounted on the end of the car-body and bears at its lower end against the side of the neck or stem C opposite to that on which the spring D presses. It will be seen that by means of this lever the draw-head may be swung laterally against the force of the spring D, and the detents thereby disengaged. The lever is provided on one side with the lateral arm P, which, when drawn down, will also move the draw-head toward the spring and disengage the detents or dogs. The upper arm of the lever O projects above the top of the car and operates in a keeper or guide, Q, and the lateral arm P projects beyond the side of the car and operates in a keeper or guide, *p*.

The operation of the coupler will be clearly understood from the foregoing description without being further detailed herein.

The modification shows the detent or dog formed rigid with the draw-head and provided with a removable wear-plate, Q, which is held in place by the pin R. The modification is further provided with a recess, L, and communicating openings M in the front end similar to the other form, and the object of the

same is to allow our improved coupler to be connected to an ordinary draw-head carrying a pin and link.

The detent or dog in the first form and the wear-plate in the other form are adapted to be removed when they become worn and replaced by others.

Having thus described our invention, we claim—

10 In a car-coupling, the combination of the draw-head having a beveled recess, E, in one side, provided with the shoulders K, and the detent or dog mounted in the front end of the said recess and having a beveled front side

and an abrupt rear side, the said detent or 15 dog being adapted to swing rearward at its free end and having its forward movement limited by the said shoulders K, substantially as and for the purpose specified.

In testimony that we claim the foregoing as 20 our own we have hereto affixed our signatures in presence of two witnesses.

JOHN H. CONN.
OLIVER C. PUGH.

Witnesses:

HENRY JACKSON,
GEORGE E. KING.