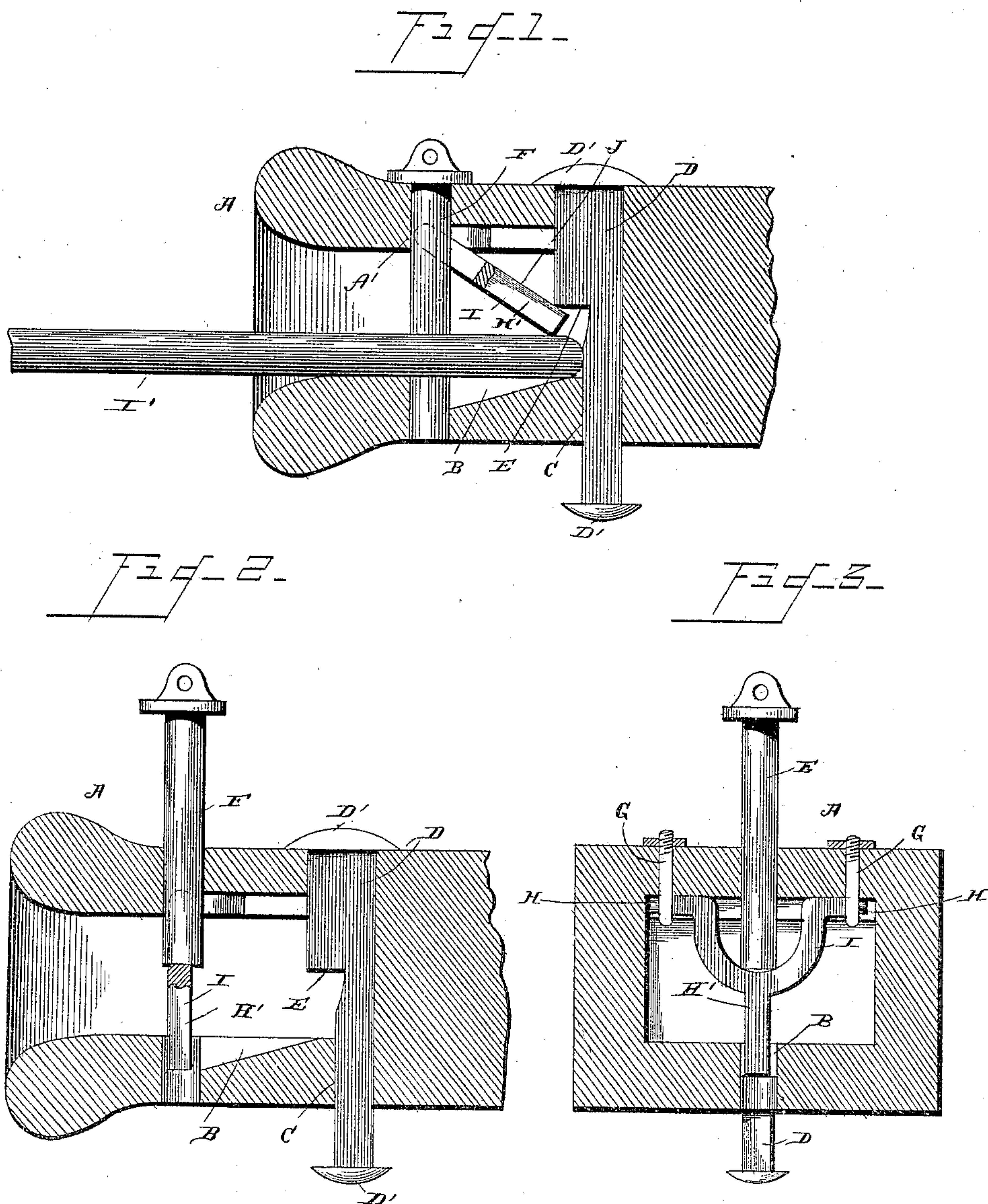


(No Model.)

S. J. FORD.
CAR COUPLING.

No. 427,758.

Patented May 13, 1890.



Witnesses:

Geo. C. Frech.

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UNITED STATES PATENT OFFICE.

SIMEON JASPER FORD, OF PLACERVILLE, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 427,758, dated May 13, 1890.

Application filed November 29, 1889. Serial No. 331,843. (No model.)

To all whom it may concern:

Be it known that I, SIMEON JASPER FORD, a citizen of the United States, residing at Placerville, in the county of El Dorado and State of California, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention has relation to car-couplers, and among the objects in view are to provide cheap and simple means whereby the coupling-pin may be supported in a raised position for the reception of the coupling-link and adapted for automatically interlocking therewith, and to provide means designed to coact with the pin-support, whereby the rear end of the link is maintained in a depressed or lowered position, thus presenting the outer end of the link in a proper position for entering the draw-head of an approaching car.

With these general objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a vertical longitudinal section of a coupling constructed in accordance with my invention, the same being in a coupled position. Fig. 2 is a similar view, the parts being in position to couple; and Fig. 3 is a transverse section on the line *x x* of Fig. 2.

Like letters of reference indicate like parts in all the figures of the drawings.

A represents an ordinary draw-head, provided near its front end or mouth with the usual pin-hole A', in which is mounted the usual pin F. The inner surface of the roof of the draw-head is provided with a recess J and at each side of the pin-hole with eyebolts G, the eyes of the bolts occurring transversely opposite each other and within the head.

I represents a Y-shaped pin-support, the terminals of the Y being laterally extended to form bearings H, each of which swings loosely in the eye of an eyebolt G. The support is provided at its lower end with a depending bar H', which rides in a groove B formed in the upper face or surface of the bottom of the draw-head. When not otherwise influenced, the support assumes a vertical position directly in line with the pin-holes formed in the top and bottom of the

head, and when setting a head for coupling, as for the reception of an approaching link, it is simply necessary to elevate the pin and permit the support to fall by gravity to a vertical position and lower the pin until its lower end rests upon the support between the branches of the Y.

In rear of the pin-holes and in line therewith there is formed in the head a rectangular opening C, vertically disposed, and in said opening there is mounted loosely a gravity-pin D, provided at its upper and lower ends with heads D', said pin being considerably longer than the opening in which it is mounted, and therefore adapted to be reciprocated or vertically moved therein to an extent permissible by the heads. In this instance the upper portion of the opening C is somewhat larger than the lower portion, and in a similar manner is the pin D proportioned, and the front face of said pin is provided with a cut-away recess, forming a shoulder E, under which the lower end of the Y-shaped support is adapted to take when the support is swung to the rear sufficiently far.

I' represents the coupling-link, which is of the usual shape.

Taking the parts in the position shown in Fig. 2, an approaching link strikes the stem H' of the Y-shaped support and swings the same to the rear with sufficient force to elevate the gravity-pin D. This permits the coupling-pin to fall and couple with the link, the link receding within the draw-head and abutting against the locking-pin D. If a link be connected with a coupling-pin within the head and it is desired to set the link to couple with an approaching car, it is simply necessary to force the link back into the head, and the same coming in contact with the lower end or stem of the support swings the same against the shoulder E of the locking-pin, which raises the pin and exerts its weight upon the end of the stem sufficient to cause the latter to depress that end of the link and thus maintain the same in a horizontal position and adapt it for coupling.

What I claim is—

1. The combination, with the draw-head having the pin-hole A' and rear hole C, of the eyebolts G, the Y-shaped support I, having

the stem H' and bearings H mounted in the bolts, and the pins F and D, the latter mounted in the hole C and provided with the recess E in its front face, substantially as specified.

- 5 2. In combination with the draw-head, its pin and link, and the pin-support I, the pin D, having the recess E in its front face to engage the link, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 10 presence of two witnesses.

SIMEON JASPER FORD.

Witnesses:

CHAS. F. IRWIN,
FRED IRWIN.