

(No Model.)

J. L. CARR.
CAR COUPLING.

No. 469,540.

Patented Feb. 23, 1892.

Fig. 1.

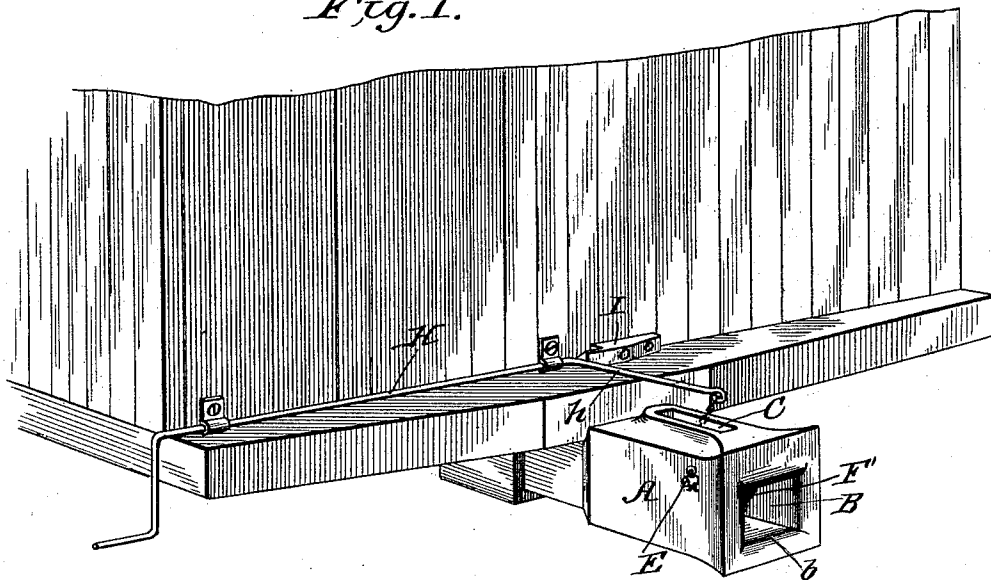


Fig. 3.

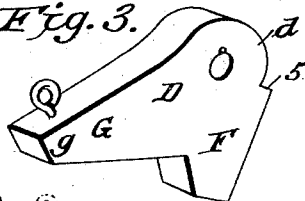


Fig. 2.

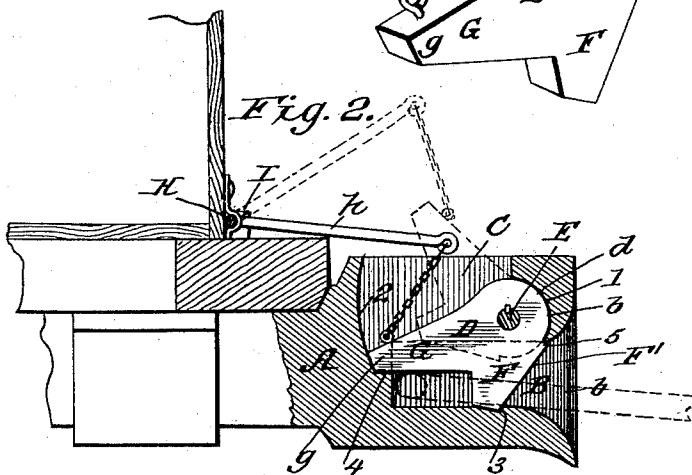
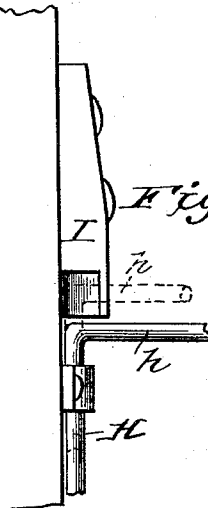


Fig. 4



WITNESSES:

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B

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UNITED STATES PATENT OFFICE.

JAMES L. CARR, OF HENRYVILLE, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 469,540, dated February 23, 1892.

Application filed October 15, 1891. Serial No. 408,845. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. CARR, of Henryville, in the county of Clark and State of Indiana, have invented a new and useful Improvement in Car-Couplers, of which the following is a specification.

My invention is an improvement in car-couplings and seeks to provide a simple, novel, and easily-operated construction by which to avoid the necessity of the brakeman or train-hand going between the cars to manipulate the link or pin, and so avoiding the dangers resulting from such operation by hand; and the invention consists in certain features of construction and novel combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of the improvement. Fig. 2 is a vertical longitudinal section of the improvement, and Figs. 3 and 4 are detail views.

The draw-head A may be secured to the car in any suitable manner and may, except in the features hereinafter described, be of ordinary construction.

The link-mortise B has a flaring mouth *b*, and a slot C extends upwardly from the said mortise and opens out of the top of the draw-head. The mortise has a front curved wall 1, a rear curved wall 2, a forward shoulder 3, and a rear stop-shoulder 4.

The coupling pin or bar D is pivoted on a cross bolt or shaft E and is formed with the arms F and G, which may be termed, respectively, the "link-securing arm" and the "gravity-arm," the arm F being arranged in advance of the arm G. The bar D also has a curved edge *d*, coinciding with wall 1, and the rear extremity *g* of the arm G moves close to the wall 2 as the coupling-bar adjusts into and out of coupled position. In the coupled position of the bar or pin D the point of the arm F rests in rear of and against the shoulder 3, and the rear end of the arm G rests upon the shoulder 4, a shoulder 5 being provided on the front side of the arm F to bear against the draw-head at the lower end of the curved front wall 1. These several bearings of the coupling pin or bar give the coupling great strength, as will be readily understood. At its front edge F' the arm F inclines rearwardly toward its lower edge, so that an en-

tering-link will lift it and pass under, when the coupling-pin will fall by gravity and secure the link. When the link is thus secured, the arm G will rest upon its rear end and so hold the link in horizontal position to properly enter a meeting draw-head.

The automatic coupling or securing of the link will be understood from the foregoing. To uncouple it is only necessary to turn the coupling pin or bar back on its pivot. To this end I connect the rear end of arm G by a chain or the like with a crank-arm *h* of a shaft H, such shaft having at its outer end a suitable handle, by which it may be conveniently turned. In operation this shaft may be turned to lift the coupling pin or bar to uncoupled position. In order to hold the pin in such uncoupled position, I support the shaft H so it can be moved longitudinally, and arrange a hook-like bearing I for engagement by the arm *h* when the shaft is turned to raise said arm. Thus, in operation, when the arm *h* is raised to lift the pin D to uncoupled position the shaft H may be moved longitudinally to set the arm *h* into engagement with the bearing I, when the parts will be secured in such position.

Having thus described my invention, what I claim as new is—

1. In a car-coupling, substantially as described, the combination of the draw-head having link-mortise B and slot C and provided with curved walls 1 and 2 and stop-shoulders 3 and 4, and the pivoted coupling pin or bar D, having arms F and G, the former being arranged to abut the stop-shoulder 3 and the latter the stop-shoulder 4, all substantially as and for the purposes set forth.

2. The improved car-coupling, substantially as described, consisting of the draw-head, the pivoted coupling pin or bar having arms F and G, the shaft H, having a crank *h*, connected with the arm G, and the bearing I, the shaft H being movable longitudinally, whereby it may be adjusted into engagement with the bearing I to secure the coupling-pin in uncoupled position, all substantially as and for the purposes set forth.

JAMES L. CARR.

Witnesses:

JOHN BECHTOLD,
JOHN VAN CAMPEN.