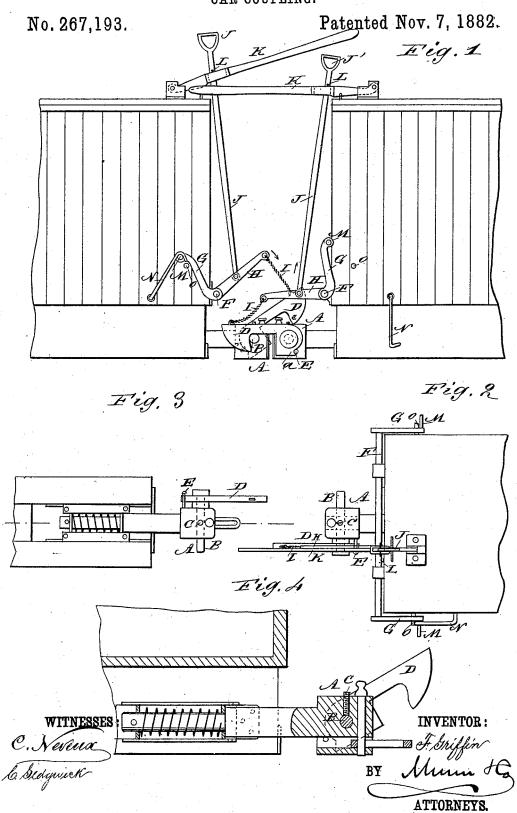
F. GRIFFIN.

CAR COUPLING.



## UNITED STATES PATENT OFFICE.

FRANCIS GRIFFIN, OF GREENVILLE, MISSISSIPPI.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 267,193, dated November 7, 1882.

Application filed May 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS GRIFFIN, of Greenville, in the county of Washington and State of Mississippi, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The invention consists in a draw-head provided with a transverse pintle, on one end of which a hook-plate is pivoted, the other end projecting from the side of the draw-head and forming a catch for the hook-plate of the opposite draw-head.

The invention further consists in a shaft pivoted to the end of the car and provided 15 with an arm connected with the coupling-hook for the purpose of raising this hook.

The invention also consists in a rod pivoted to the arm of the shaft and extending to the top of the car and passing through a loop in a 20 lever pivoted to the top of the car, whereby the hooks of both cars can be raised from the top of one car, as will be fully described hereinafter.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal elevation of the end parts of the sides of two cars provided 30 with my improved car-coupling, showing the cars coupled and one of the coupling-hooks raised. Fig. 2 is a plan view of one of the cars, showing it uncoupled. Fig. 3 is a plan view of the draw-head. Fig. 4 is a longitudinal sectional elevation of the same.

The draw-head A is provided with apertures for the link and pin, in the usual manner, with the exception that the link-opening is in the lower part of the draw-head. A pintle, B, passes transversely through the draw-head, and is held in place by a set-screw, C. On one end of this pintle a hook-plate, D, is loosely mounted, and the other end of the pintle projects from the side of the draw-head, as shown. The hook-plate D is provided at its pivoted end and at the lower edge with a short projection, a, which catches on a stud, E, projecting from the side of the draw-head, at the rear corner, for the purpose of preseventing the hook-plate from dropping lower

than into the horizontal position. A horizontal shaft, F, is journaled on the end of the car, at the bottom, and this shaft is provided at each end with a crank-handle, G, and at or near the middle with an arm, H, the end of 55which is connected by means of a chain or equivalent device, I, with the hook-plate. A rod or bar, J, is pivoted to the arm H and extends to the roof of the car, which rod is provided at its upper end with a handle, J'. A 60 lever, K, is pivoted on the top of the car and projects from the end of the car to the next car, as shown. This lever is provided with a loop or slot, through which the rod J passes a pintle, L, being passed through the rod J 65 above the lever K, so that by raising the lever K the rod J will be raised. Each crank handle G is provided with a stud or pin, M, at the end, over which pin a hook or chain, N, is passed, to hold the crank-handle when it is 70 swung back. A check-stud, O, projects from each side of the car, against which stud the crank-handles G strike to prevent them from being swung back too far.

The operation is as follows: When the cars 75 come together the beveled ends of the hookplates D pass over the projecting ends of the pintles B and catch on the same, whereby the cars will be coupled automatically. If the cars are to be uncoupled, the hook-plates D 80 must be raised to disengage them from the projecting ends of the pintles B. This can be accomplished from the sides of the car by moving the crank-handles G in the direction of their arrows and locking them by means 85 of the hook or chain N. If the cars are to be uncoupled from the roof of one of the cars, the hook-plate D of that car on which the operator stands is raised by means of the rod or bar J, and the hook-plate D of the opposite car is 90 raised by means of the lever K of this opposite car, as is shown in Fig. 1. The cars can thus be coupled or uncoupled very easily and rapidly and without any danger to the operator, and cars provided with the usual link-and- 95 pin coupling can be coupled to cars provided with my improved coupling.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—.

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1. In a car-coupling, the combination, with the draw-head A, of the hook-plate D, the shaft F, the arm H, the chain I, the rod or bar J, and the lever K, substantially as herein shown 5 and described, and for the purpose set forth.

2. In a car-coupling, the combination, with the draw-head A, of the hook-plate D, the shaft F, the arm H, the chain I, the rod or bar

J, the lever K, and the pintle L, passed through the rod or bar J above the lever K, 10 substantially as herein shown and described, and for the purpose set forth.

FRANCIS GRIFFIN.

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Witnesses: John L. Griffin, W. E. Hunt.