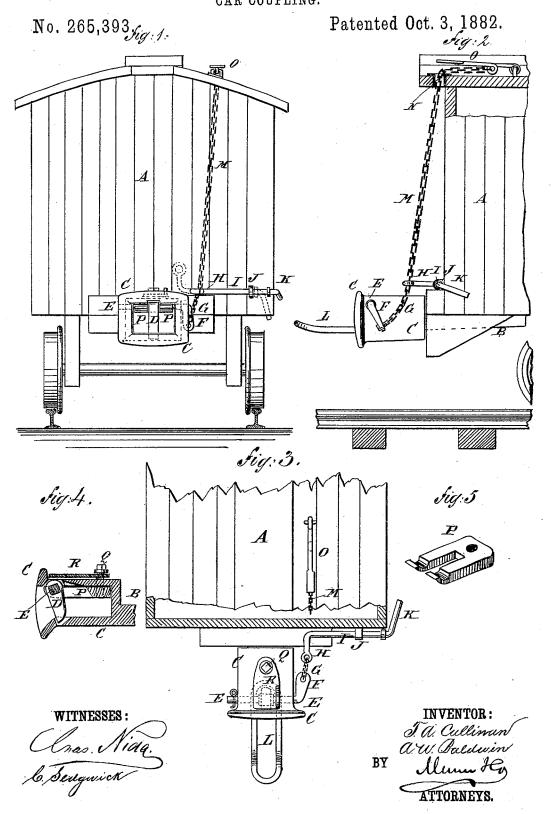
T. A. CULLINAN & A. W. BALDWIN.



## United States Patent Office.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 265,393, dated October 3, 1882. Application filed March 14, 1882. (No model.)

To all whom it may concern:

Be it known that we, THOMAS A. CULLINAN and Augustus W. Baldwin, both of Junction | place. City, in the county of Davis and State of Kan-5 sas, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, 10 in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of a car to which our improvement has been applied. Fig. 2 is a side elevation of the same, partly in section. 15 Fig. 3 is a plan view of the same, partly in section. Fig. 4 is a sectional side elevation of the draw-head. Fig. 5 is a perspective view of the guard.

The object of this invention is to facilitate

20 the coupling and uncoupling of cars.

The invention consists in a car-coupling constructed with a draw-head, a hinged couplingpin, a hinging cross-pin having a crank-arm upon its end, a chain attached to the crank-25 arm, a rod having crank-arms for raising the coupling pin and locking it when raised, a guard to protect the hinging cross-pin, and a cap-plate to prevent rain and sleet from entering the draw-head; also, in the combina-30 tion, with the draw-head, the hinged couplingpin, and the hinging cross-pin having a crankarm upon its end, of the connecting-chain and the rod having crank-arms upon its ends, whereby the coupling-pin can be readily raised 35 and can be locked in a raised position; and, also, in the combination, with the draw-head, the hinged coupling-pin, and the hinging crosspin, of the guard and its bolt, whereby the said cross-pin will be protected from the enter-40 ing link, as will be hereinafter fully described.

A represents a car-body. B is the draw-bar,

and C is the draw-head.

D is the coupling-pin, which is placed within the draw-head C, and is made of such a 45 length that its ends may enter holes in the upper and lower sides of the said draw-head, and thus have a firm support when sustaining the draft-strain. In the upper end of the couplingpin D is formed a square hole to receive the 50 square middle part of the cross-pin E, which | grooved upon its upper side to receive the 100

passes through holes in the sides of the drawhead C, and thus hinges the coupling-pin D in

To one end of the cross-pin E is attached, or upon it is formed, a crank-arm, F, to the outer 55 end of which is attached the end of the chain G. The chain G is also attached to the end of an arm, H, formed upon or attached to the inner end of a rod, I, which works and slides in bearings J, attached to the end of the car- 60 body A. To the outer end of the rod I is attached, or upon it is formed, a crank-arm, K, for convenience in turning the rod I to raise and lower the coupling-pin D to uncouple and couple the cars. With this construction, when 65 the two cars are run together the end of the coupling-link L, attached to one car, will strike, raise, and pass the coupling-pin D of the other car, which coupling pin D, as soon as the end of the link L has passed it, will drop 70 down through the said link, and thus couple the cars automatically. With this construction, also, when the rod I has been turned to raise the coupling-pin D, by sliding the said rod inward the crank-arm K will rest against 75 the car-body A, and thus lock the couplingpin D in a raised position, so that the cars can be drawn apart and can be run together without coupling when desired.

To the end of the arm H is attached the end 80 of a chain or rod, M, which may be a continuation of the chain G, and which passes through a bushing, N, in a hole in the top of the car, and is attached to a lever, O, or has a handle formed upon or attached to it. The lever O is 85 pivoted to the top of the car. With this construction, by drawing the chain or rod M upward the rod I will be turned to raise the coupling-pin D, and by reaching over, taking hold of the chain M, below the top of the car, and go giving it a pull to one side the rod I will slide in its bearings and lock or unlock the coup-

The cross-pin E is protected by a guard or shoe, P, placed in the upper part of the inte- 95 rior of the draw-head C, and secured in place by a bolt, Q, passing through its inner end and through the upper side of the said drawhead. The forward end of the guard P is

cross-pin E, and is rounded or beveled upon its lower side, so that the end of the entering link L will pass it readily. The guard P is slotted, as shown in Figs. 4 and 5, to receive 5 the coupling-pin D when turned up. The hole in the top of the draw-head C is covered by a cap plate, R, which is secured in place by the bolt Q, that holds the guard P. The cap plate R is designed to prevent rain and sleet from o entering the draw-head C through the hole in its upper side.

Having thus described our invention, we claim as new and desire to secure by Letters Pat-

as herein shown and described, and consisting of the draw-head C, the hinged coupling-pin D, the cross-pin E, having crank-arm F, the chain G, the rod I, having arms H K, the guard P, and the cap-plate R, as set forth.

2. In a car-coupling, the combination, with the draw-head C, the hinged coupling-pin D, and the hinging cross-pin E, having crankarm F, of the chain G and rod I, having arms H K, substantially as herein shown and described, whereby the coupling-pin can be readily raised and can be locked in a raised position, as set forth.

3. In a car-coupling the combination, with the draw-head C, the hinged coupling-pin D, 30 and the hinging cross-pin E, of the guard P and its bolt Q, substantially as herein shown and described, whereby the said cross-pin will be protected from the entering link, as set forth.

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Witnesses: J. W. BARNEY, GEO. M. KNIGHT.