

(No Model.)

W. R. BAGLEY.

CAR COUPLING.

No. 266,961.

Patented Nov. 7, 1882.

Fig. 1.

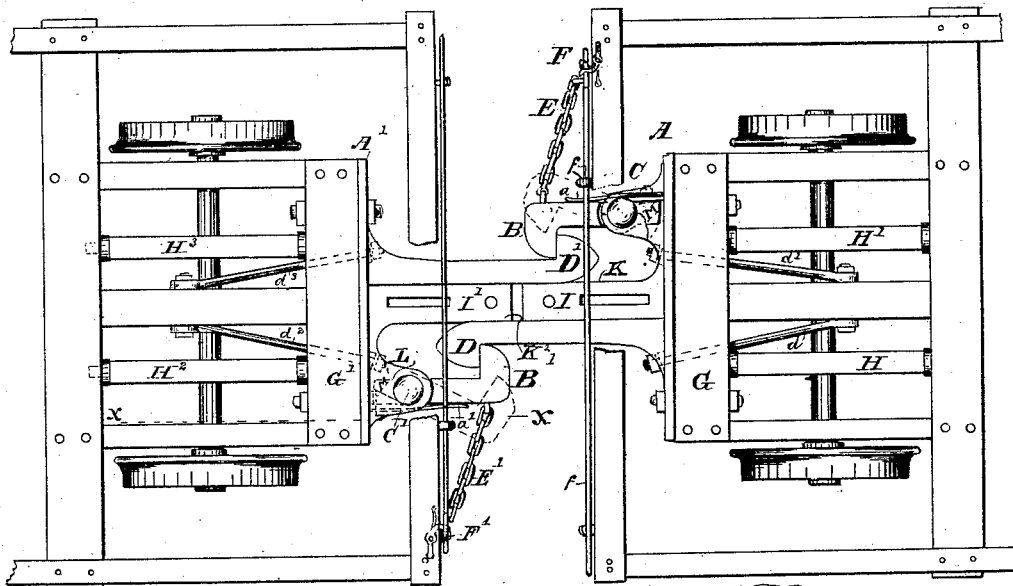


Fig. 2.

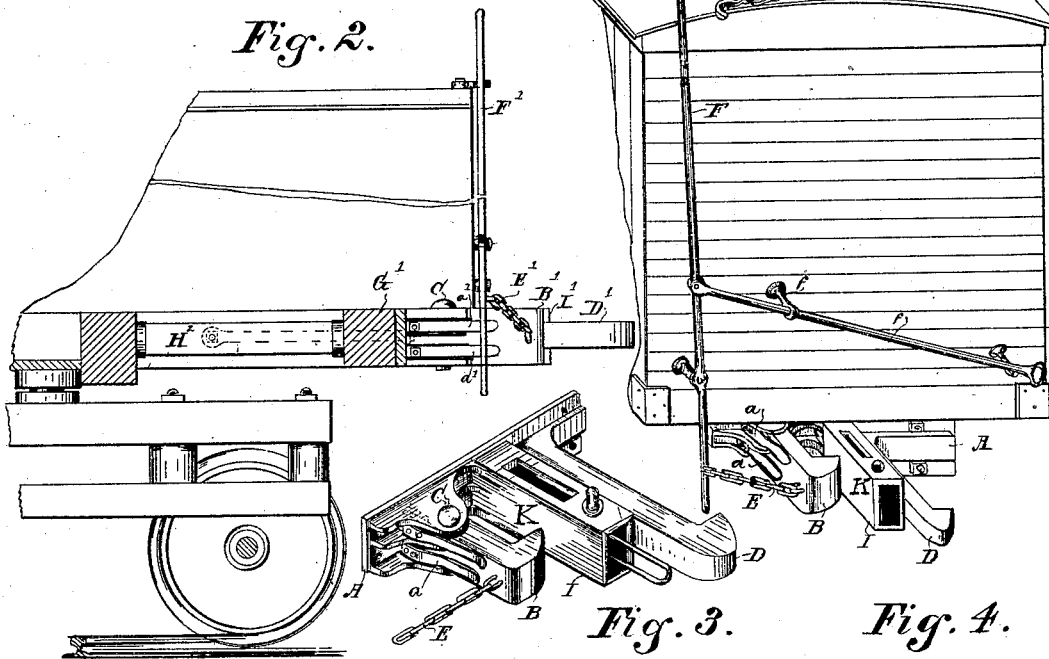


Fig. 3.

Fig. 4.

WITNESSES.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 266,961, dated November 7, 1882.

Application filed August 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. BAGLEY, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to provide an automatic car-coupling adapted for the purpose of coupling cars of different heights, also couple cars provided with the ordinary draw-head or link-coupling to cars provided with my new device.

The device of my coupling, hereinafter more fully described, relates (in case both ends of the car are provided with my invention) to the class of automatic self-closing couplings.

Referring to the accompanying drawings and the letters of reference thereon, all of which are made a part of this specification, Figure 1 is a plan view of my coupling, and, as shown, bolted to the cross-pieces G G' of the two ordinary car-frames, a portion of these frames only being shown. Fig. 2 is a longitudinal section of the left-hand car, shown on Fig. 1 and on the dotted lines X X, and looking upward to the same, in which form the interchangeability of my coupling is plainly visible. Fig. 3 represents a perspective view of my device detached from the car-frame, and with the ordinary link-guide and link-pin inserted. Fig. 4 is a perspective end view of a car with my device attached, and illustrating the disconnecting-lever arrangement and the mode of disengaging cars, the brakeman or other employé being either on the top of the car or on level ground.

In Figs. 1, 2, 3, and 4, I I' represent an ordinary draw-head, with flanges A and A' bolted to the cross-pieces G and G'. The vertical side K of I and I' is a straight plane, and the whole forming in its construction an ordinary draw-head to receive a guide-link and link-pin. On the left side of I and I', as represented in drawings, Fig. 1, a wedge-shaped hook, D and D', is permanently attached, being either cast or bolted thereon, according to the material used. This hook D and D' is so affixed as to be vertical and at right angles to the horizon-

tal flange A and A'. The movable wedge-shaped catches or hooks B and B' are pivoted to flanges L and L', moving on the pivots C and C', their shanks being extended beyond the center, as shown in Fig. 1. The stationary hooks D D', moving toward B and B', slide on the plain vertical face K K' of I and I', and will, in consequence of the wedge shape of the hook D and D', push or slide the movable catch-hooks B and B' laterally, and thus allow them to slip in sufficiently to enable the movable catch-hooks B and B' to fall back and take a firm hold, and thus connect the two cars. The springs a a', pressing on the back of B and B', will keep them in position, and will also allow them to open sufficiently to receive and, by falling back, to hold the hooks D and D'. To disengage these hooks D and D' and to cut car-trains, a chain, E and E', is fastened to a lever, F and F', on the rear of the hooks B and B'. Lever F and F' is made of sufficient length to extend over and above the top of the cars, and is so arranged as to be conveniently handled by the switchman or brakeman. To lever F and F' a side bar, f, may be provided and attached at a convenient height from the ground to enable the brakeman to move lever F and F' while standing on the ground from either side of the car.

The usual devices of deadening the blow of cars surging together, by springs or india-rubber buffers, can be provided for as illustrated or in any other manner.

In case of an accident, supposing one of the hooks or catch-hooks to be broken, the other will still have a sufficient hold to keep the cars connected, and on passing a curve the hooks and catch-hooks will follow the motion of the cars without unusual strain or wear and tear, and in the same way the hooks and catch-hooks allow of a much greater play vertically in case of descending or ascending grade or inclined plane.

To provide for the difference of height in different cars and to enable them to be coupled without trouble and prevent their becoming disconnected while in motion, the movable catch-hooks B and B' are made of a sufficient width vertically so as to allow the stationary hooks D and D' to have a firm hold at all times.

By reviewing my invention as a whole, the following are the principal advantages which I claim for the same. The coupler can be made entirely of cast material, or by making
5 either the whole or a part of it of wrought-iron and wood its weight is less than the present draw-bar heads in use, and, as before said, in case of one hook or catch-hook breaking the other is still of sufficient strength and holds
10 so firmly that the train of cars will not be disconnected. It will couple any and all height of cars, and without stopping, by the simple use of levers F and F', thus avoiding accident to the men, and cars can be coupled or cut in
15 trains in less time and without danger to men than by the present system. When my coupler is used, the cars, in case of jumping the track or other sudden motion, either vertical or sidewise, will not uncouple or become disconnected, nor is the coupler as likely to break
20 as is the case with a guide-link now in use, but will hold the cars together, thus saving lives and property. It is durable, simple, and not liable to get out of order, and in case of a
25 wreck it can be easily replaced by a new one or its parts, and its cost, though it may be

greater than the old form, is fully compensated by its many advantages of durability, safety, and saving of time, and its freedom from danger to the employes. 30

Having now fully described my invention and its advantages, what I claim as new, and desire to secure by Letters Patent, is—

1. A car-coupler consisting of an open-mouthed draw-head, a rigid projecting hook-bar, D, with an outturned hook upon one side of the draw-head and a short pivoted hook upon the other side, the construction and combination being substantially as herein described. 35 40

2. A draw-head having flange A and a long projecting hook, D, and a short hook, B, pivoted in ears c on the flange A, the parts being combined and operating substantially as described. 45

In testimony whereof I have affixed my signature in presence of two witnesses.

WILLIAM R. BAGLEY.

Witnesses:

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HUGH MCBRIDE.