

(Model.)

W. L. DAVIS.

CAR COUPLING.

No. 250,893.

Patented Dec. 13, 1881.

Fig: 1.

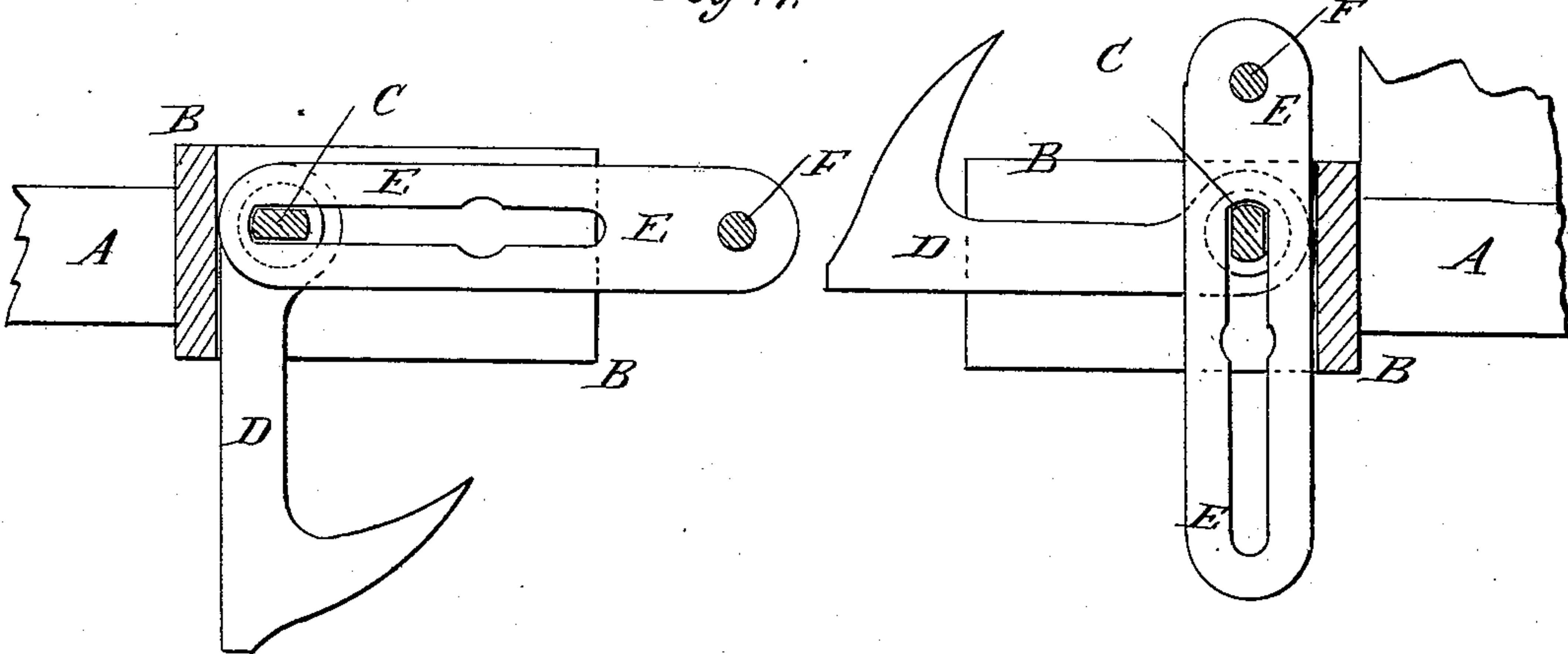


Fig: 2.

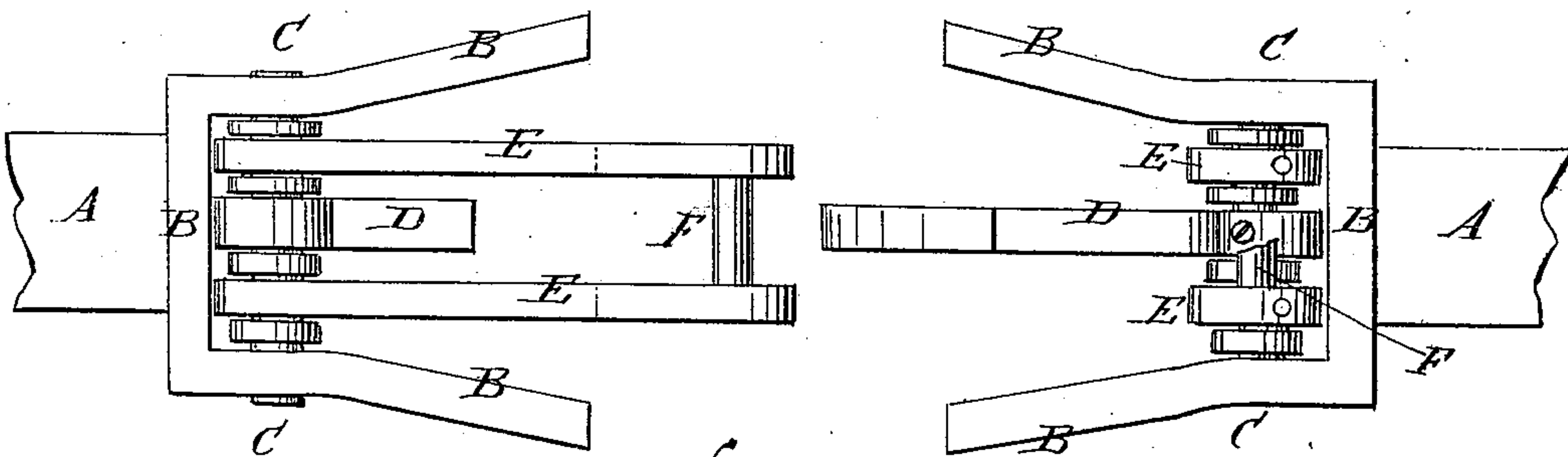


Fig: 3.

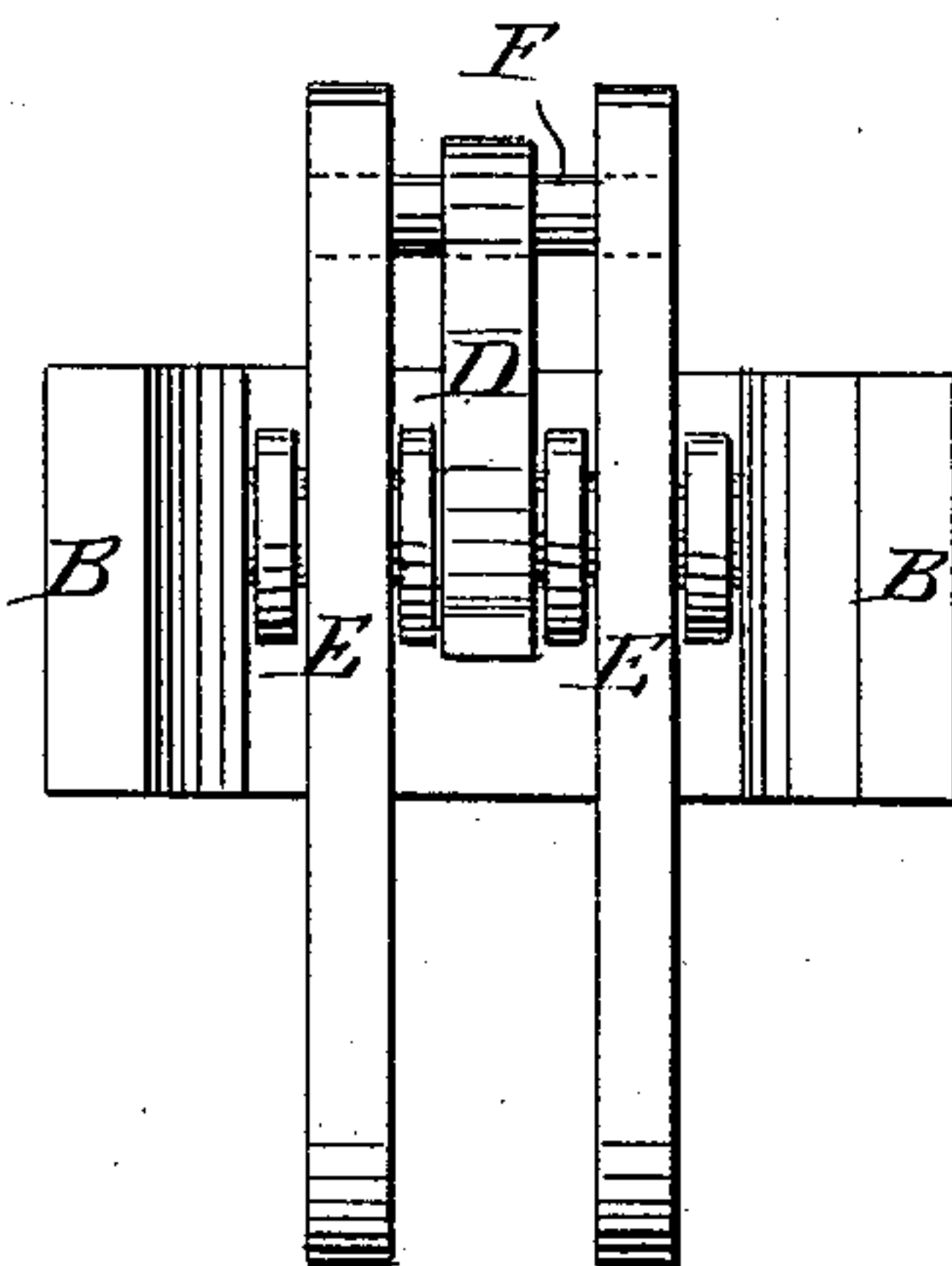
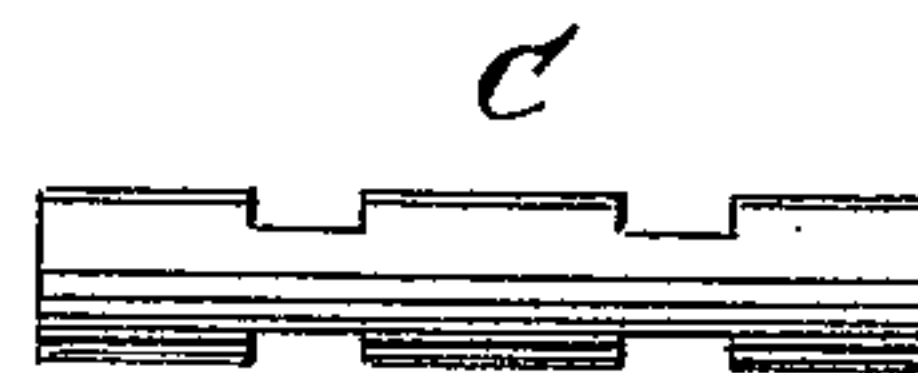


Fig: 4.



Fig: 5.



WITNESSES:

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 250,893, dated December 13, 1881.

Application filed September 14, 1881. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM LORTON DAVIS, of South Amboy, in the county of Middlesex and State of New Jersey, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description, reference being 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 sectional side elevation of my improvement. Fig. 2 is a plan view of the same. Fig. 3 is a front elevation of one part of the coupling. Fig. 4 is a front view of the hinging-pin. Fig. 5 is a plan view of the same.

The object of this invention is to promote convenience and security in coupling cars.

The invention consists in a car-coupling constructed with a bumper-head made open at top and bottom, and having a hook connected with the inner parts of its sides by a pin, with which pin is also connected sliding bars or the sides of a link for turning the connecting-pin to raise and lower the hook, and connected at their outer ends by a pin to adapt them to serve also as a coupling-link, as will be hereinafter fully described.

A represents the draw-bars, which are designed to be connected with the car-frames in the ordinary manner.

B are the bumper or coupling heads, which are formed upon or otherwise secured to the ends of the draw-bars A. The bumper-heads B are made open at top and bottom, and with their sides or arms parallel at their inner parts and inclined from each other at their outer parts, as shown in Fig. 2.

C are draft pins or bolts, placed in holes in the parallel parts of the bumper-heads B. Upon the centers of the pins C are placed the eyes of hooks D, the outer sides of which are inclined and the inner sides slightly concaved, as shown in Fig. 1. The hooks D are secured to and prevented from turning upon the pins C by set-screws, as shown in Fig. 3.

E are links or bars which are slotted longitudinally, and are placed upon the pins C upon the opposite sides of and equally distant from the hooks D. The slots of the links E are made narrower than the diameter of the

pins C, and the said pins are notched or flattened, as shown in Figs. 4 and 5, to fit into the said slots, so that the pins C will be turned by the links E, and the links E can slide up and down upon the pins C. The links E are notched in their middle parts upon the opposite sides of their slots, as shown in Fig. 1, to allow them to be passed on and off the pins C. The upper ends of the links E of each pair are connected by a pin, F, which serves as a handle in operating the said link.

The hooks D are secured to the pins C in such positions that the shanks of the said hooks will be at right angles with the links E, as shown in Fig. 1. With this construction, when the hooks D are in a vertical position and the links E are in a horizontal position, as shown in the left-hand part of Fig. 1, by taking hold of the outer ends of the said links E, raising them into a vertical position, and then letting them slide downward, the hook D will be locked in a horizontal position, as shown in the right-hand part of Fig. 1. When two cars are to be coupled the links E of the one car are arranged in a horizontal position and the hook of the adjacent car is arranged in a horizontal position, as shown in Fig. 2. Then when the cars are run together the connecting-pin F of the links E of one car will strike against the inclined outer side of the hook D of the other car, rise, pass over the point of the hook, and drop into its concavity, coupling the cars. When the cars are to be uncoupled, the links E of the horizontal or coupling hook D are raised and swung forward into a horizontal position, which movement lowers the said hook into a vertical position, uncoupling the cars. With this construction the cars will couple themselves when they are run together, so that there will be no necessity for an attendant to stand between the cars as they are run together to guide the parts of the coupling into place, as is necessary with ordinary couplings.

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

1. A car-coupling constructed substantially as herein shown and described, consisting of the bumper-head B, the connecting-pin C, the hook D, and the slotted links E, connected at their upper ends by a pin, F, as set forth.

2. In a car-coupling, the bumper-head B, made open at top and bottom, and with outwardly-inclined sides, substantially as herein shown and described, to allow the operating
5 parts of the coupling to swing up and down freely, as set forth.

3. In a car-coupling, the combination, with the bumper-head B, made open at top and bot-

tom, of the hook D, links E, and connecting-pins C F, substantially as herein shown and described, whereby cars can be conveniently
10 coupled and uncoupled, as set forth.

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Witnesses:

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