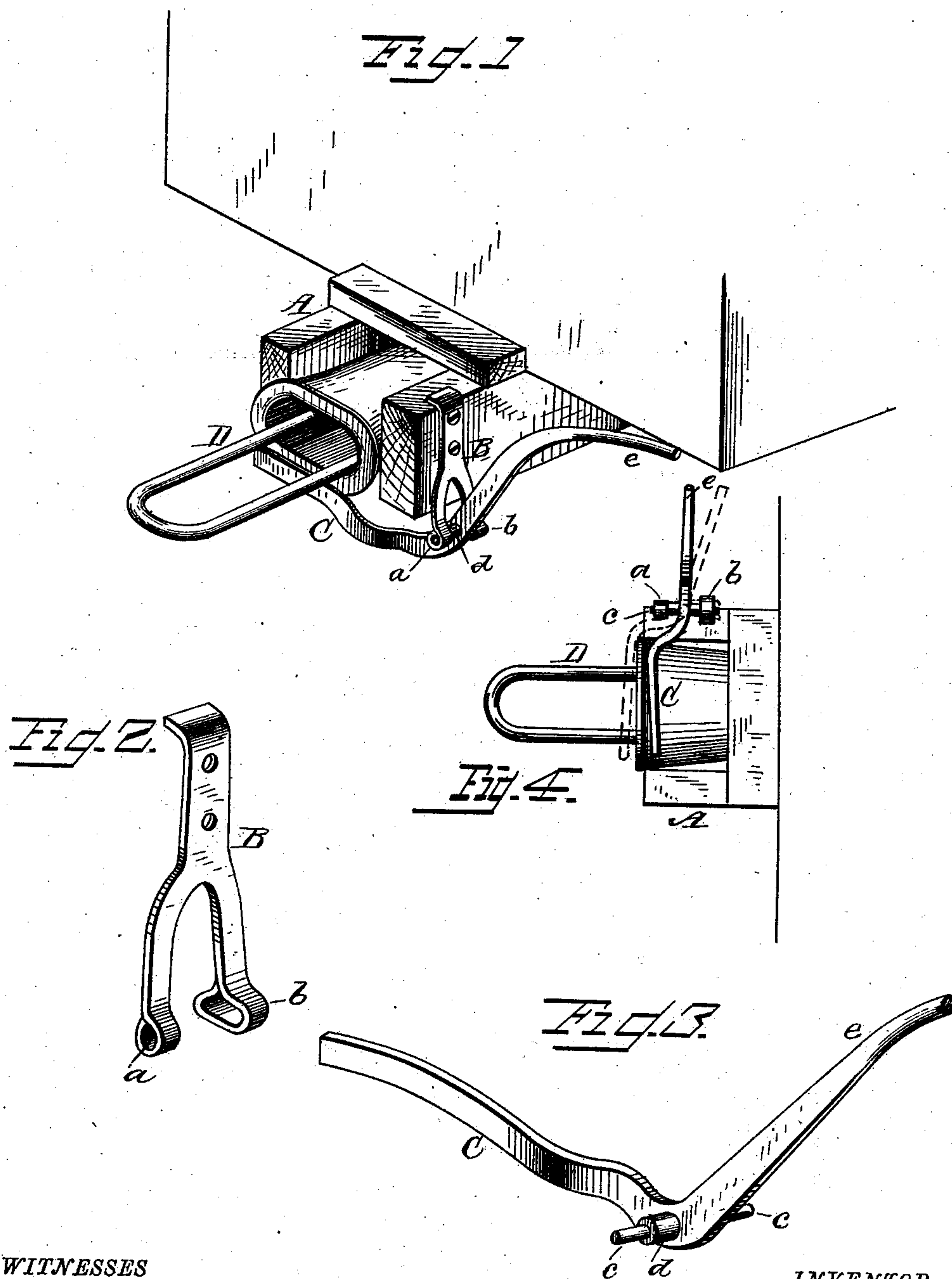


(No Model.)

N. HALSTED.  
CAR COUPLING.

No. 272,430.

Patented Feb. 20, 1883.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

NATHANIEL HALSTED, OF SCRANTON, PENNSYLVANIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 272,430, dated February 20, 1883.

Application filed December 15, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, NATHANIEL HALSTED, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Safety Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of my invention; Fig. 2, a detail perspective view of the bifurcated plate; Fig. 3, a similar view of the coupling-lever; and Fig. 4, an under side plan view, showing the action of the lever.

This invention relates to certain new and useful improvements in devices for coupling cars by the use of a hinged lever having its handle extending out toward the side of the car; and the object of the present invention is to produce such a device that will be at once simple in its construction, easily and cheaply manufactured, effective in its operation, and readily applied to the bumpers of any car for raising the coupling-link to the desired height to enter the opposing draw-head with ease and perfect safety to the brakeman or train-hand, thereby preventing the risk of life and limb, as said train-hand stands outside of the rail entirely away from the bumpers, also enabling the ready adjustment of the coupling-link by the lever to suit any difference of elevation there may be in the opposing draw-heads, while at the same time said lever will, when the handle is released of its own weight, drop under, and thus automatically bring said handle up against the bumper out of the way. These objects I attain by the construction substantially as shown in the accompanying drawings, and hereinafter described.

In the drawings, A represents the bumper of a car, to which is suitably attached the bifurcated plate B, having its bifurcations terminating in bearings *a b* for the journals *c* of a lever, C. These journals *c* have each an enlarged extension, *d*, so as to prevent the sides of the lever from coming in contact with the sides of the bearings and hold the lever at the

point of connection midway between said bearings *a b*. The journal-bearing *a* is of ordinary shape, while the one *b* is elongated in a horizontal direction in order to allow a lateral play to the journal therein, thereby giving the lever a longitudinal action in order to adjust the coupling-link to the opposing draw-head when operated upon by its handle *e*, which is curved in an outward direction toward the side of the car, so that the coupling of the cars may be effectually performed without the necessity of the brakeman or train-hand entering between said cars, thereby preventing the risk of his life and limb. The blade of the hinged or pivotal lever C is of a weight greater than the handle *e*, and is curved in the manner substantially as shown, in order to come under and adjust the coupling-link D when said handle is operated. After the coupling has been effected and the handle released, the weighted lever, having one of its journals working free in the elongated bearing *b* of the bifurcated plate B, falls of its own weight under the draw-head and automatically brings said handle up against the bumper out of the way, thereby rendering the lever self-adjusting and always ready for use.

The bifurcated plate B is intended to be cast or wrought in one piece, of the form substantially as shown, rendering the same readily attachable to the bumper of any car, while the lever C being also cast or wrought in one piece in the form and manner substantially as shown, the whole device may be manufactured at a comparatively trifling cost, and by their use the coupling of cars rendered easy and free from danger, and at the same time the brakeman or train-hand, having no necessity to go between the cars, can always have the engine-driver in view and be ready for the interchange of the usual signals.

For use on cars having the bumpers longer than those shown in the drawings, the lever may be bent up in such a manner as to come under the draw-head without departing from the spirit of my invention.

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

1. In a car-coupling device, a bifurcated plate cast or wrought in one piece, having its bifur-

cations terminating in journal-bearings, one of said bearings being elongated in a horizontal direction, as shown, in combination with a suitable lever connected thereto, and operating substantially as and for the purpose set forth.

2. In a car-coupling device, the plate B, having bifurcations terminating in the bearing *a* and the horizontally-elongated bearing *b*, in combination with the curved lever C, having a suitable handle, and journals for attachment to the bifurcated plate, substantially as and for the purpose specified.

3. In a car-coupling device, the bifurcated

plate B, having bearing *a* and horizontal elongated bearing *b*, in combination with the lever C, provided with handle *c* and journals *c*, said journals having enlarged extensions *d*, all arranged and operating in the manner substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

NATHANIEL HALSTED.

Witnesses:

E. F. CHAMBERLIN,

A. L. BAKER: