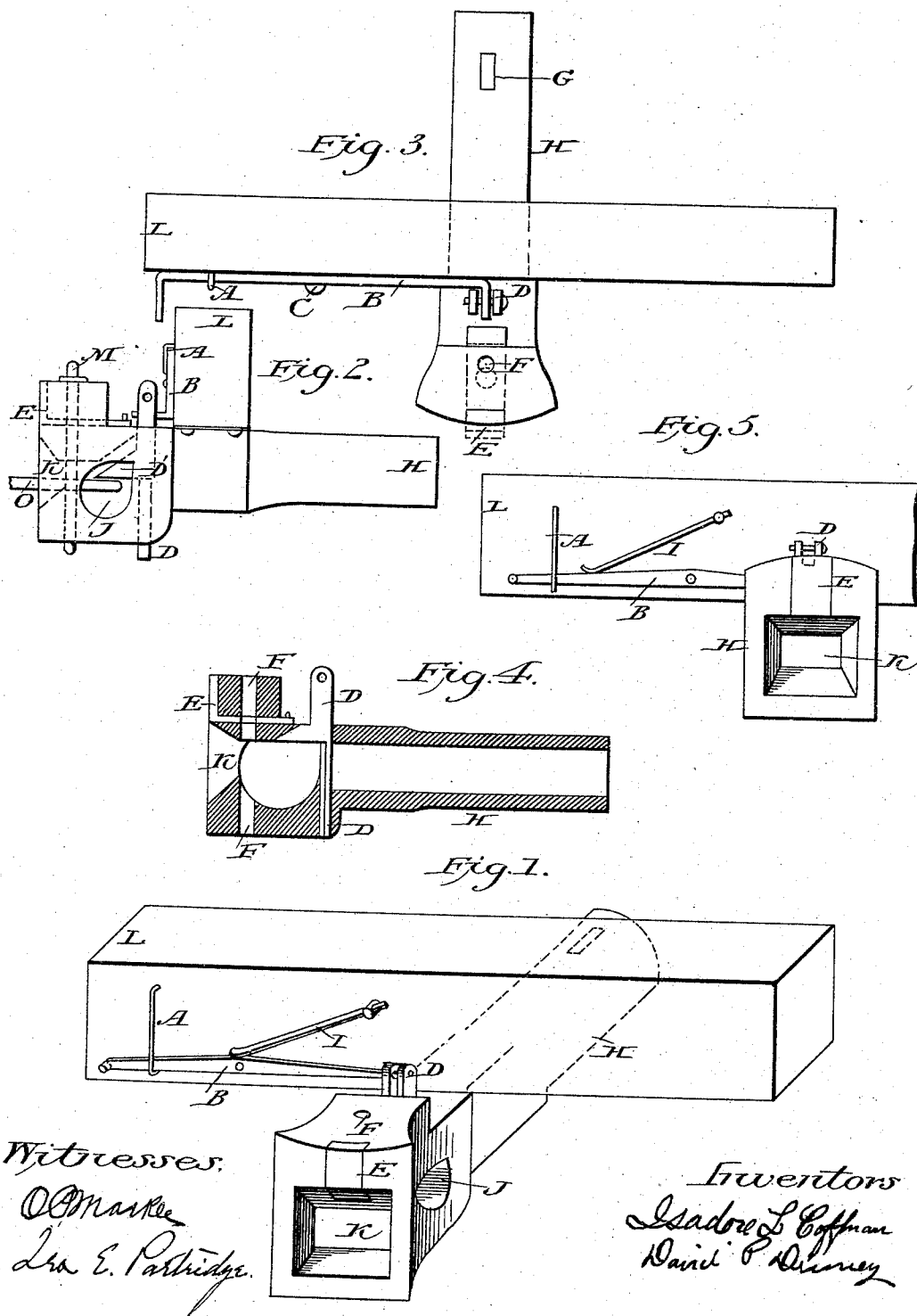


(No Model.)

I. L. COFFMAN & D. P. DENNEY.
CAR COUPLING.

No. 487,251.

Patented Dec. 6, 1892.



Witnesses:

O. M. M. M.

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UNITED STATES PATENT OFFICE.

ISADORE L. COFFMAN AND DAVID P. DENNEY, OF UNIONTOWN, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 487,251, dated December 6, 1892.

Application filed March 11, 1892, Serial No. 424,515. (No model.)

To all whom it may concern:

Be it known that we, ISADORE L. COFFMAN and DAVID P. DENNEY, citizens of the United States, residing at Uniontown, in the county of Fayette and State of Pennsylvania, have invented a new and useful Safety Car-Coupling Device, of which the following is a specification.

Our invention relates to improvements in car-couplings wherein the ordinary loose link and pins are used; and its object is to provide a sure and expeditious method of connecting cars using such couplings and at the same time avoid the danger to life and limb incident to the adjustment of link and pins in such couplings. We attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view. Fig. 2 is a side elevation. Fig. 3 is a top view. Fig. 4 is a vertical section, and Fig. 5 is an end view.

Similar letters refer to similar parts throughout the several views.

The cross-bar or bumper L is the same used in ordinary cars and the draw-head H is the same in general outline as the ordinary draw-head used in link-couplings, the improvements and additions being as follows:

First. E is a movable flat slide shaped thus —, one arm of which enters draw-head H, passing beyond coupling-pin hole F, and through which said pin passes when cars are coupled, the other arm of slide E standing vertical and parallel with front or face of draw-head and fitting into depression in front or face of draw-head when cars come together. The purpose of slide E is to hold the coupling-pin in position, so that links will enter draw-head. This is accomplished by drawing out slide E, as shown in Fig. 3, so that the coupling-pin hole in slide is not in line with coupling-pin hole F in draw-head H. Then when coupling-pin M is inserted in top of draw-head H at F it will be stopped by slide E, where it will stand until two cars coming together will drive slide E back, so that the hole in it comes in line with the hole F in draw-head H, when the coupling-pin M will fall into position, as in Fig. 2.

Second. D is a bar passing vertically through draw-head H immediately in the rear of the link-cavity J and having an arm or projection D', extending into said cavity, so as to catch link o, as shown in Fig. 2. The purpose of D and D' is to regulate and adjust the link o when the pin M is in position, Fig. 2, and it is desired that the outer end of link o be inserted in next car. This is accomplished by causing D' to press upon that end of link o which is inside the draw-head H, such pressure of D' causing the outer end of link o to rise, and as the longer portion of said link o is outside of the draw-head H it is only necessary to relax the pressure of D' to cause the outer end of o to fall. Thus we impart the motions described to o by the agency of D, which in turn is controlled by lever B.

Third. B is a lever or bar fastened on front side of bumper L with screw or bolt c and having ends bent at right angles with L, the end nearest guard A being used for handle by which lever is worked, the end at D passing through top of bar D, so that when lever B is moved it will impart a corresponding motion to D. The purpose of the lever B is to impart motion to vertical bar D, and thus be able to adjust link o. This can be done by one standing at side of car by taking hold of outer end of lever B.

Fourth. I is a spring fastened on bumper L and pressing on lever B between c and A, Fig. 1, so as to hold end of lever B on bottom of guard A. The same result, however, may be accomplished by making outer end of lever B of sufficient weight to hold it down by force of gravity.

What we claim as our invention, and desire to secure by Letters Patent, is—

The lever B, fastened to the bumper L and attached to vertical bar D, with its arm D' working in link-cavity J, in combination with the loose slide E, substantially as described.

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Witnesses:

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