

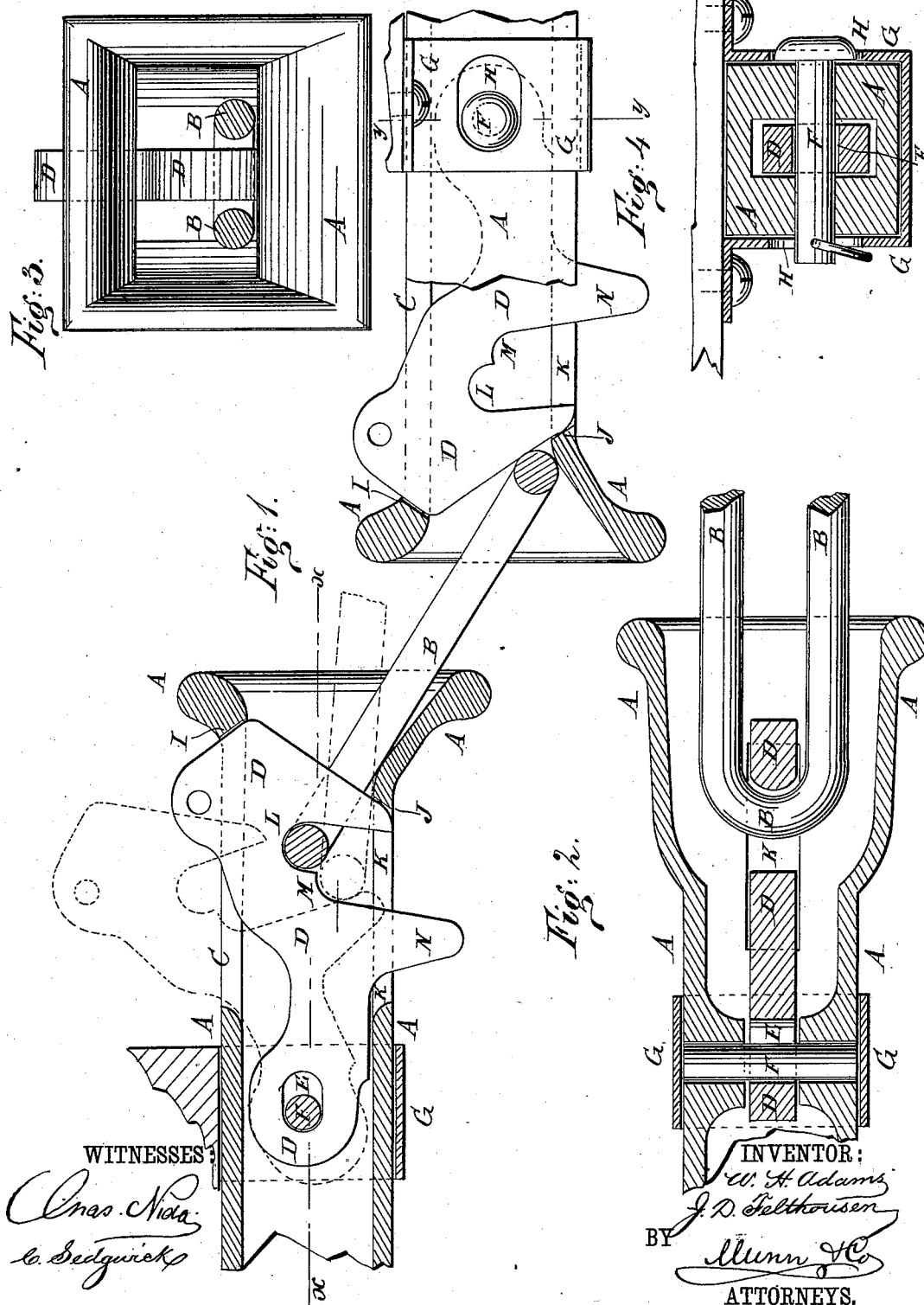
(No Model.)

W. H. ADAMS & J. D. FELTHOUSEN.

CAR COUPLING.

No. 305,261.

Patented Sept. 16, 1884.



UNITED STATES PATENT OFFICE.

WILLIAM H. ADAMS AND JAMES D. FELTHOUSEN, OF ALBANY, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 305,261, dated September 16, 1884.

Application filed July 3, 1884. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. ADAMS and JAMES D. FELTHOUSEN, of the city and county of Albany, New York, 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 part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of our improvement, partly in section. Fig. 2 is a sectional plan view of a part of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a front elevation of a part of the same, the link being shown in section; and Fig. 4 is a sectional end elevation of a part of the same, taken through the line *y y*, Fig. 1.

The object of this invention is to provide car-couplings simple and inexpensive in construction, durable and safe in use, and not liable to get out of order.

The invention consists in a car-coupling constructed with a coupling-head having flaring mouth and slots, with beveled forward ends in its upper and lower sides, and the hook having slot in its rear end, having angular forward end, having two link-seats in its throat, and having a projection on its lower side, whereby the coupling will sustain the draft-strain securely, and will couple the cars automatically when they are run together, as will be hereinafter fully described.

A represents the head of the coupling, which is made with a flaring mouth, so that the coupling-link B will enter it readily. The coupling-head A is designed to be secured to the car in the ordinary manner. In the top of the head A is formed a slot, C, of sufficient size to allow the coupling-hook D to be readily inserted and removed through it. In the rear end of the hook D is formed a short slot, E, to receive the pin F, by means of which the said hook is secured in place. The pin F can be kept in place by the clamp or keeper G, that supports the coupling-head in place, as shown in Fig. 2, or it can be provided with a head at one end and a key at the other end, as shown in Fig. 4. In the latter case the keeper G has a short slot, H, formed in it, as shown in Fig.

1, to receive the head and forward end of the pin F, and allow the coupling-head A to have the necessary play. The forward end of the hook D is made angling, or with its upper and lower parts beveled, to fit against the inclined seats I J, formed at the forward end of the slots C, and the slot K in the lower part of the head A, and into which the point of the hook D projects, so that a draft-strain upon the said hook will hold it more firmly in place, and prevent it from jumping up and releasing the link. By this construction the coupling-hook D is provided with three bearing-points, the inclined seats I J, and the pin F, so that the said hook will be capable of sustaining any amount of draft-strain that may be put upon it without its being necessary to make it so large and heavy as to be clumsy. With this construction, also, when the cars are run together and the link B enters the mouth of the head A of an adjacent car, the end of the said link will strike against the lower inclined part of the forward end of the hook D, push back the said hook, cause its forward end to rise, and will pass its point, when the said forward end of the hook will drop into place and the cars will be coupled automatically.

In the throat of the hook D are formed two seats, L M, to rest upon the end of the link B and support the said link while the cars are being run together, the upper seat, L, being used, holding the link in an inclined position, when cars of unequal height are to be coupled, as shown in full lines in Fig. 1, and the lower seat, M, being used, holding the link in a horizontal position, when cars of the same height are to be coupled, as indicated in dotted lines in Fig. 1.

Upon the lower side of the hook D is formed a point, N, which projects through the slot K in the lower side of the coupling-head A, and which serves as a guard to prevent the said hook from being pushed back too far, and as a guide to keep the said hook in proper position while moving up and down.

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

1. A car-coupling constructed substantially as herein shown and described, and consisting of the coupling-head A, having flaring mouth

and slots C K in its upper and lower sides, and the hook D, having slot E in its rear end, an angular forward end, two link-seats, L M, in its throat, and a projection, N, on its lower side, as set forth.

2. In a car-coupling, the combination, with the coupling-head having slots C K, with beveled forward ends in its upper and lower sides, and the link B, of the hook D, working in said slots C K, and having angular forward end projection, N, on its lower side, and provided with two link-seats, L M, in its throat, substantially as herein shown and described, whereby the coupling will sustain the draft-strain securely, and will be self-coupling, as set forth.

3. In a car-coupling, the coupling-hook D, made substantially as herein shown and described, with a slot, E, in its rear end, an

angular forward end, and two link-seats, L M, in its throat, to adapt it to be inserted in the coupling-head, and to support the link while the cars are being run together, as set forth.

4. In a car-coupling, the combination, with the lower part of the coupling-head A, having slot K, of the hook D, having projections N on its lower side, substantially as herein shown and described, whereby the said hook will be kept from being pushed too far back by the entering link, and the said hook will be kept in place while moving up and down, as set forth.

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Witnesses:

WILLIAM J. PRATT,
JAMES MILNINE.