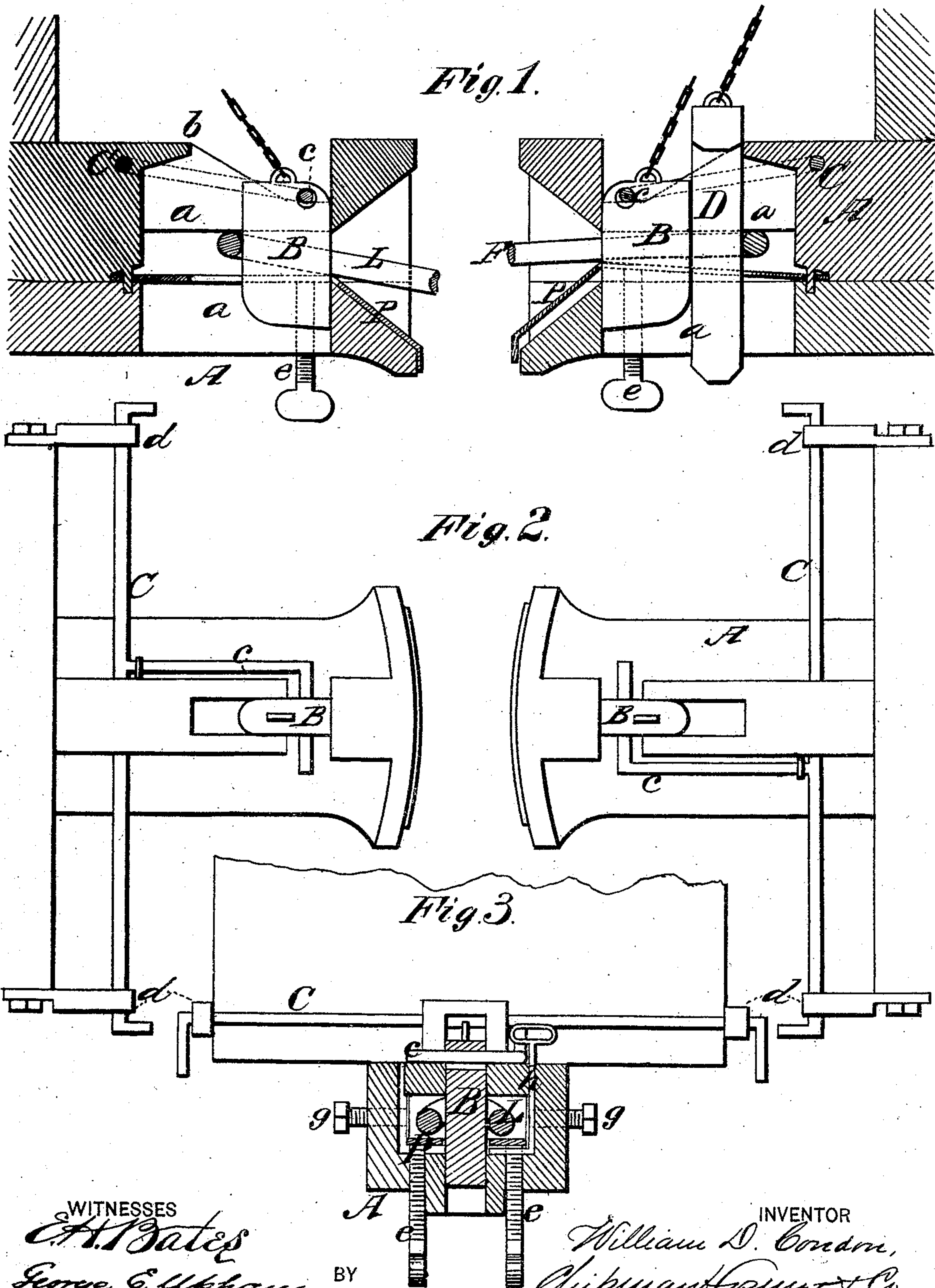


W. D. CONDON.
Car-Couplings.

No. 151,851.

Patented June 9, 1874.



WITNESSES
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BY

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WILLIAM D. CONDON, OF OPELIKA, ALABAMA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO W. C. AND L. LANIER, OF WEST POINT, GEORGIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **151,851**, dated June 9, 1874; application filed
May 16, 1874.

To all whom it may concern:

Be it known that I, WILLIAM D. CONDON, of Opelika, in the county of Lee and State of Alabama, have invented a new and valuable Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation 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 drawing is a representation of a longitudinal section of my car-coupling, and Fig. 2 is a plan view. Fig. 3 is a transverse sectional view.

This invention has relation to railroad-car couplings of the self-coupling kind; and it consists in an adjusting device applied to the floor of the draw-head, and also to the side walls thereof, whereby the coupling-link will be positively guided to its proper place on entering the draw-head, and whereby any wear of the parts can be compensated for. It also consists in the employment, for passenger-cars, of a pin or key, in combination with a gravitating coupling block or pin and a link, for the purpose of taking up the slack between cars, as will be hereinafter explained.

The following is a description of my improvement:

In the annexed drawings, A designates a draw-head, presenting an outwardly-flaring rectangular mouth. This draw-bar may be applied to the car in the usual well-known manner, so as to operate as a spring-buffer. A slot, *a*, is made vertically and centrally through the draw-bar A, at the rear part of the upper end of which is a lipped extension, *b*, for a purpose hereinafter explained. B designates a coupling block or pin, which is hung from the free end of an arm, *c*, so as to assume, when unrestrained, a vertical position in the slot *a*. The arm *c* is rigidly secured to a horizontal transverse rod, C, which is supported in suitable bearings *d d*, and extended as far as the sides of the car, as shown in Fig. 2. The letter *y* represents a pin attached to the side of the draw-head, and serves as a

stop to prevent raising the arm and coupling-pin higher than is necessary.

It will be seen that a person can conveniently and safely raise the coupler B by means of the rod C when it is designed to effect an uncoupling.

If it is desired to uncouple from a platform or from the top of a car, this may be done by attaching a chain to the coupler.

When a link, L, is thrust into the draw-head, the coupler B will swing back and drop through the link, thereby effecting a coupling; and, in order to prevent the coupler from being displaced when it is suddenly struck by a link in coupling, the lip *b* is employed, as shown in Fig. 1, which checks the upward thrust of said coupler, and insures its return to its proper place.

A considerable space is necessarily left in rear of the coupler B, which would allow an undue endwise play of the cars were it not for the pin or key D, which I insert through the slot *a* and through the link L in rear of the coupler, thereby taking up the slack.

The floor of the draw-head is covered by means of a plate, P, which is secured at its rear end. The front portion of the plate P consists of an incline, *f*, and a downwardly-projecting lip, *h*, to conform to the contour of the lower inclined lip of the draw-head. By this construction the link will strike against the incline *f* when the cars to be coupled are brought together, and will be accurately carried into the hollow of the draw-head. The front portion of this plate is adjustable by means of set-screws *e*, tapped through the bottom of the draw-bar. By means of this adjustable plate the link L can be held in, or nearly in, a horizontal position, indicated in the left-hand view of Fig. 1. On each side of the draw-bar is applied a set-screw, *g*, which is tapped through the side walls. The screws *g* are intended for guiding the end of a link, L, into the draw-bar, so that the coupler will always drop through the link. The screws being adjustable, they can be set up as they wear.

Instead of using set-screws *g g* for raising

the bearing-plate P, a lifting-hook, *h*, (shown in Fig. 3,) may be employed. This hook will be recessed into the draw-head, out of the way, and its upper end will be arranged conveniently for use.

What I claim as new, and desire to secure by Letters Patent, is—

1. The adjustable perforated plate P, having the incline *f* and lip *h*, in combination with the set-screw *e*, coupling-link L, and draw-head A, substantially as specified.

2. The combination of the rod *C*, having arm *c*, the projection *b* on the draw-head, the stop *y*, pin B, and link L, substantially as specified and shown.

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

WILLIAM D. CONDON.

Witnesses:

GEORGE E. UPHAM,
ROBERT EVERETT.