X. KRAPF & J. F. BOERCKEL.

Car-Couplings.

No. 145,353. Patented Dec. 9, 1873.

Fig: 1.

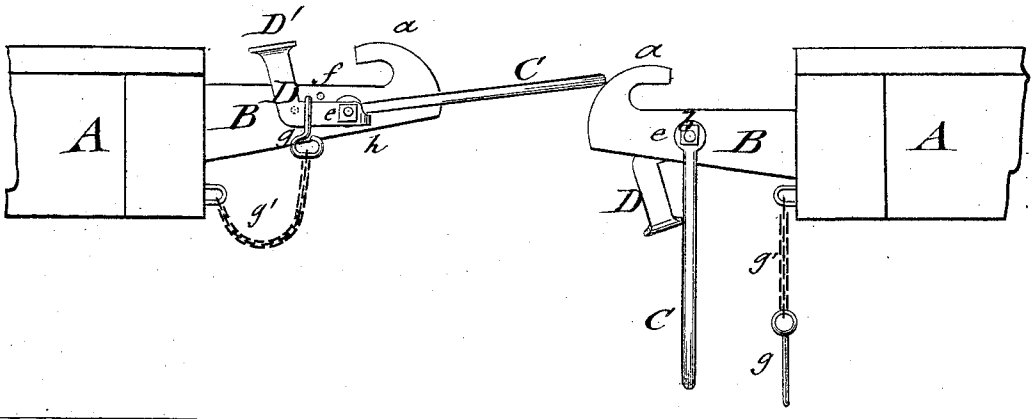


Fig: 2.

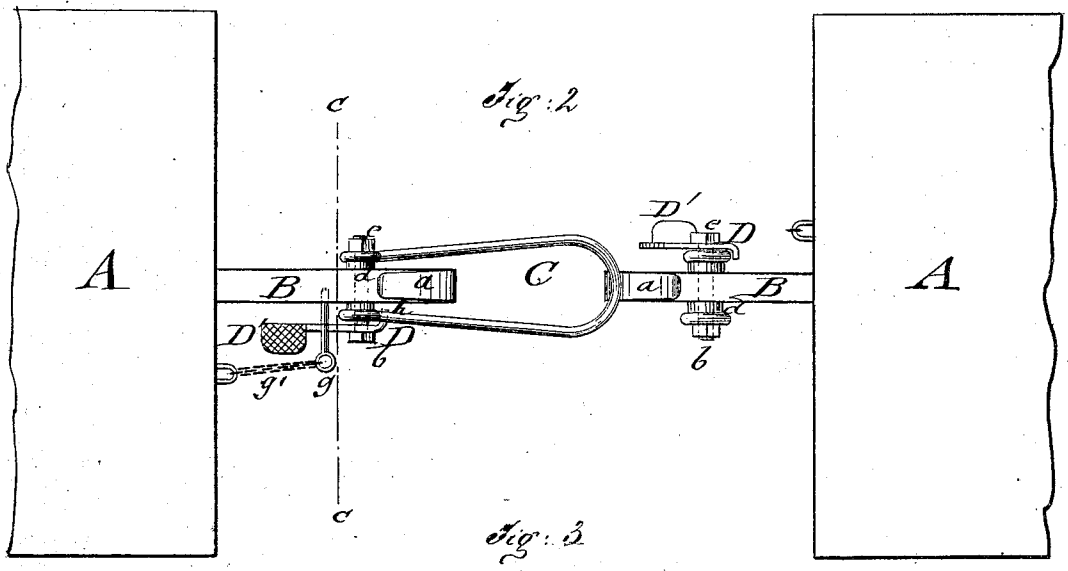
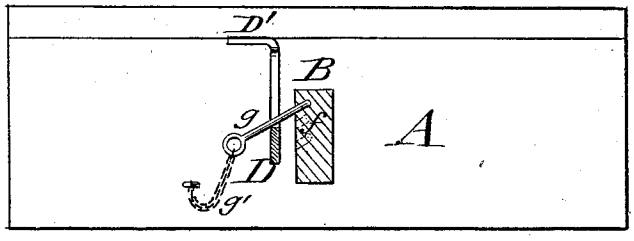


Fig: 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

XAVER KRAPF AND JOHN F. BOERCKEL, OF ALLENTOWN, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **145,353**, dated December 9, 1873; application filed September 20, 1873.

To all whom it may concern:

Be it known that we, XAVER KRAPF and JOHN F. BOERCKEL, of Allentown, in the county of Lehigh and State of Pennsylvania, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of our improved car-coupling; Fig. 2, a top view; and Fig. 3, a vertical transverse section of the same on the line *c c*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claims.

In the drawing, A represents the platform of the car to which the coupling is attached. B is the draw-head, of suitable strength and material, which is rounded off at its front part, and provided with a backwardly-curved hook, *a*, over which the coupling-link slides easily, and is then retained without being disconnected by the jerking of the car. The coupling-link C is pivoted to draw-head B by means of a cross-bolt, *b*, washers *d*, and nuts *e*, and may be made in the usual form, with parallel sides, or wider at the forward part, as indicated in Fig. 2. At one side of the draw-head B are arranged, back of bolt *b*, a series of upwardly-inclined holes, *f*, of different heights, for pin *g*, which is attached, by a chain, *g'*, to platform A. A bell-crank-shaped lever, D, with treadle D', is pivoted, sidewise of link C, to bolt *b*, projecting, with its curved extension-hook *h*, under link C, and lifting the same into horizontal or inclined position, when lever D is turned up by hand-power, ratchet-wheel and chain, or other suitable means. When in inclined position for coupling, it is secured therein by placing pin *g* into holes *f*, selecting the hole required for producing such an inclination of the link as the height of the platform of the car to be coupled renders necessary. The coupling-link C strikes then, on the approach of the adjoining draw-head, the curved hook of the same, is thereby gradually raised, allowing pin *g* to drop out, and passes over hook *a*, dropping on the draw-head back of the hook, and coupling the cars.

The uncoupling is quickly performed, as merely the lifting of the link above the draw-head, by pressure on the treadle D', is required.

The coupling device is simple in construction and operation—therefore less expensive—and adapted for cars of different heights, by bringing the link of the lower platform into use.

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

1. The combination of draw-head B, coupling-link C, and lever D, pivoted on cross-bolt *b*, and pin *g*, substantially as set forth.

2. The draw-head B, having holes *f*, upwardly inclined, and at different heights, to insure downward inclined position of pin *g*, and the dropping of the pin on discontinuing pressure of lever D, as set forth.

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Witnesses:
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