

I. B. LEWIS.
Car-Couplings.

No. 150,587.

Patented May 5, 1874.

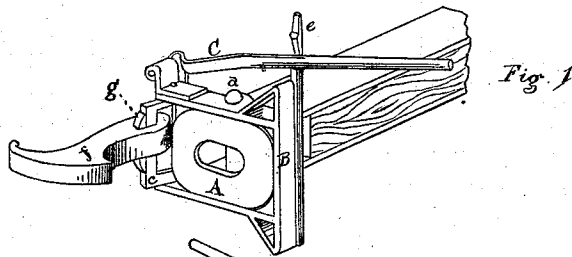


Fig. 1.

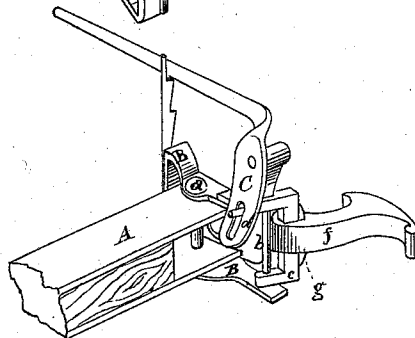


Fig. 2.

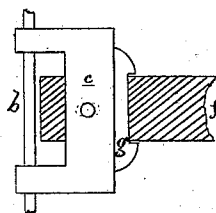


Fig. 3.

ATTEST.

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Ira B. Lewis.
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UNITED STATES PATENT OFFICE.

IRA B. LEWIS, OF ALBION, MICHIGAN, ASSIGNOR TO HIMSELF AND
CORNELIUS VAN WYCK, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **150,587**, dated May 5, 1874; application filed
April 8, 1873.

To all whom it may concern:

Be it known that I, IRA B. LEWIS, of Albion, in the county of Calhoun and State of Michigan, have invented a new and useful Improvement in Car-Couplings; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view of an ordinary draw-head fitted with my improved self-coupling device, looking at it from the front. Fig. 2 is a rear perspective view of the same. Fig. 3 is a longitudinal vertical section of the hook, showing the packing interposed between it and the swinging gate.

Like letters refer to like parts in the several figures.

This invention is an improvement upon the patent issued to me August 5, 1873; and consists mainly, first, in connecting the operating-lever to the coupling-hook in such manner that the weight of the lever will, under ordinary circumstances, keep the hook in position for coupling; and, second, in providing the coupling-hook with an elastic packing, which is placed between it and the gate, to which it is secured for the purpose of preventing it from being damaged by contact with the coupling-frame of another car.

In the drawing, A represents an ordinary draw-bar, with the usual coupling-pin *a*. B is a metallic frame fitted on the draw-bar, to which it is secured by the pin *a*. In the projecting ends of the frame, at one side, a shaft, *b*, is vertically journaled, to which is secured a gate or vibrating frame, *c*, its upper bar projecting to the rear of the shaft into a slot, *d*, in the short arm of a bell-crank lever, C, piv-

oted to the upper corner of the frame, its long arm extending across the top of the frame to the side of the car, being supported, if desired, at an elevation by a notched standard, *e*, rising from the side of the frame. *f* is a hook, having a vertical slot at the end of its shank, which embraces the vertical bar of the frame *c*, to which it is secured by a pin passing through a horizontal slot in the vertical bar, so that the hook may have a slight longitudinal play. Between the hook and frame is inserted an elastic rubber washer or packing, *g*, which is designed to ease the shock or impact upon the parts when the hook comes violently in contact with the frame B of an approaching car, over the free edge of which it engages, the hook on that car engaging in like manner with the plain edge of the frame B, both cars being fitted with devices of the construction shown. By raising the outer ends of the levers, the hooks will be withdrawn from engagement with the opposing draw-heads.

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

1. The combination of the slotted lever C with the gate *e* and hook *f*; the lever being adapted, by means of its weight, to keep the hook in position for coupling, substantially as described.

2. The combination of the elastic packing *g* with the frame *c* and link *f*, the packing being interposed between the stock of the hook and the front of the frame, as and for the purpose described.

IRA B. LEWIS.

Witnesses:

J. L. MILLER,
C. VAN WYCK.