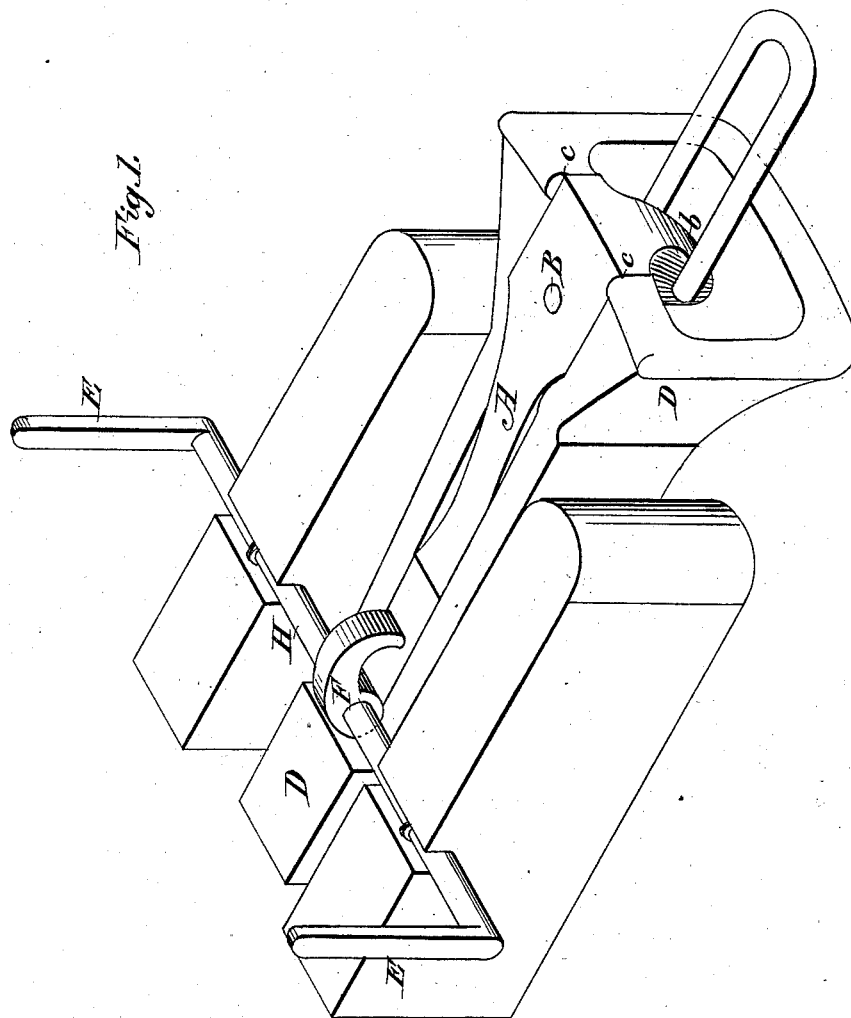


H. L. PRESTON.  
Car-Coupling.

No. 216,889.

Patented June 24, 1879.



*Attest:*  
*H. H. Schott,*  
*J. Day Mills*

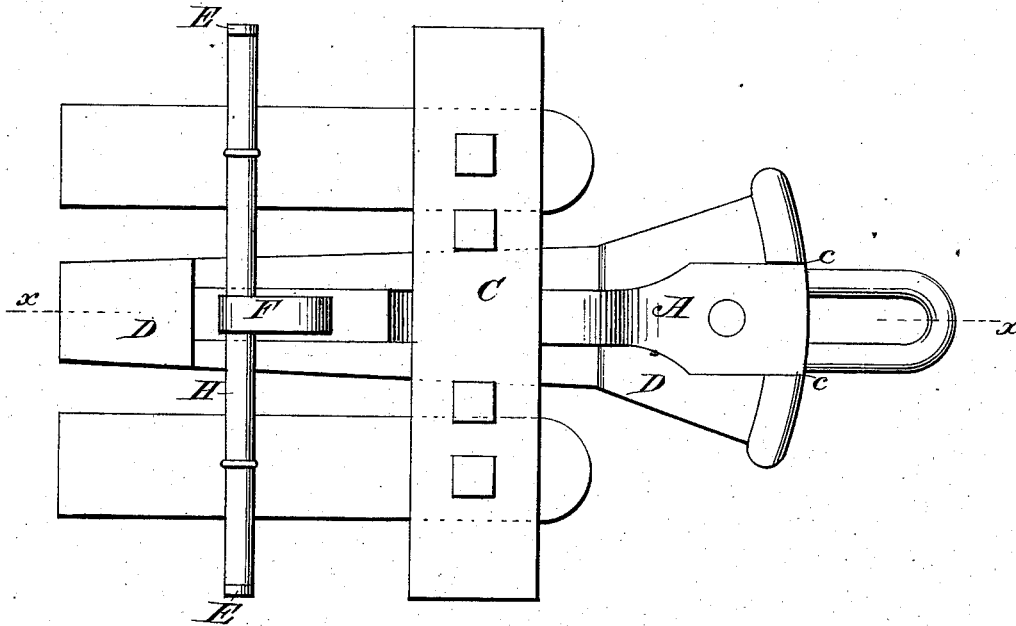
*Inventor:*  
*Harvey L. Preston*  
*By W. Burris Atty*

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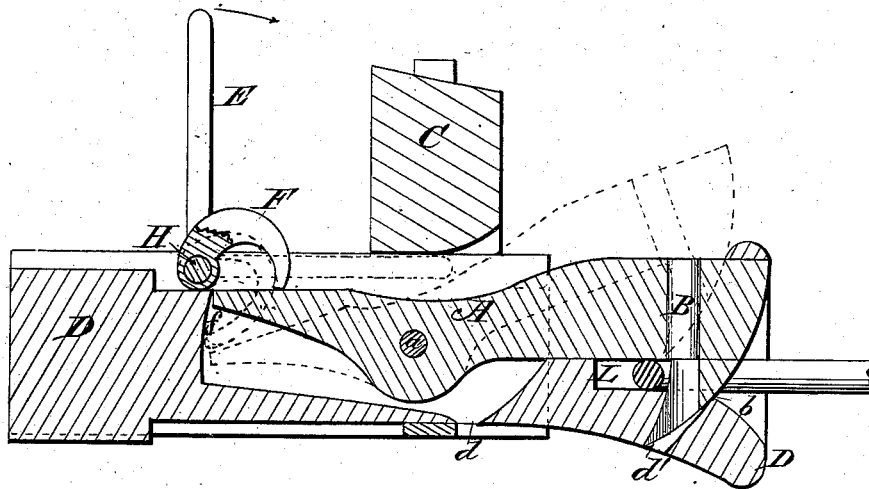
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*Fig. 2.*



*Fig. 3.*



*Attest:*

F. H. Schott.

J. Day Mills

*Inventor:*

Harvey L. Preston

By W. Purvis Atty

# UNITED STATES PATENT OFFICE.

HARVEY L. PRESTON, OF CLINTON CITY, IOWA, ASSIGNOR TO IOWA  
AUTOMATIC CAR COUPLING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **216,889**, dated June 24, 1879; application filed  
May 28, 1879.

*To all whom it may concern:*

Be it known that I, HARVEY LOOMER PRESTON, of Clinton City, in the county of Clinton and State of Iowa, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view with the covering off. Fig. 2 is a top view. Fig. 3 is a vertical longitudinal section on line *x x* of Fig. 2.

This invention relates to automatic couplings for railroad-cars; and it is designed especially as an improvement on the coupling for which a patent was granted to McGinty and Mead, July 16, 1878, No. 206,119, the object being to construct a coupling that will automatically couple with the ordinary link-and-pin coupling, and that may be locked open for pushing cars when it is not desired to couple them, as hereinafter more fully described.

A is a lever, made light at the inner end, and pivoted at *a* near the center and in the line of draft, and is provided with a beveled hook, *b*, and a movable pin, B, on the inner side of the hook. This movable pin may be made of iron or steel. I prefer steel, which is better for resisting the wear to which it is subjected in use. It is made to fit neatly in the hole in the lever, so that it will keep its place, but when worn may be "drifted" out and a new one inserted in its place.

C represents the frame of the car, and D the draw-head, having a bell-shaped mouth, and is open on the upper side, as shown at *c*, to allow the lever A, with the hook and pin, to adjust itself to the variations in the height of the cars. E is a hand-lever, and F a cam on a shaft, H, for operating the pivoted lever.

The draw-head is provided with two openings, *d d'*, in the lower side, to allow the water and dirt which may enter it to run out.

These couplings may be used with the ordinary link on passenger or freight cars.

In coupling, the link will be held in a hori-

zontal position by the weight of the outer end of the lever A, and as the cars approach each other the end of the link impinges against the beveled end of the lever and the bell-shaped mouth of the draw-head, raising the outer end of the lever, as shown in dotted lines, and passing under it, striking against the shoulder L, which is constructed in the draw-head instead of the lever, as in the above-named patented coupling; and as the link is thus inserted in place the hook and pin drop by the weight of the lever into the link, securely coupling the cars.

The cam F is of the peculiar shape shown in the drawings, and is adjusted to bear upon the inner end of the lever A, which, being pivoted near the center, is easily raised for uncoupling the cars; and it is locked in a raised position, for pushing cars without coupling them, by turning downward the lever E till the end of the cam strikes the shoulder *f* on the draw-head, as shown by dotted lines in Fig. 3 of the drawings; and the lever A, being made light at the inner end and heavy at the front end, as shown in the drawings, requires no spring to keep it in place.

The draw-head being open, as described, allows all needed motion to the link and lever with the hook and pin, the face of the hook being made sufficiently curved to retain the link in place, and the wear upon it tends to increase that curvature, preventing the link from slipping off the hook and pin.

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

1. In a car-coupling, the pivoted lever A, provided with a movable pin, B, on the inner face of the beveled hook *b*, substantially as and for the purposes described.

2. In combination with a lever, A, pivoted near its center, and provided with a hook for holding the link, the cam F, adjusted to bear upon the inner end of the lever and to lock against the shoulder *f*, substantially as and for the purposes described.

In testimony that I claim the foregoing as my own invention I hereunto affix my signature in presence of two witnesses.

HARVEY LOOMER PRESTON.

Witnesses:

S. J. MILLS,  
W. W. SANBORN.