

F. A. MARKLEY.
Car-Coupling Links.

No. 146,926.

Patented Jan. 27, 1874.

Fig. 1.

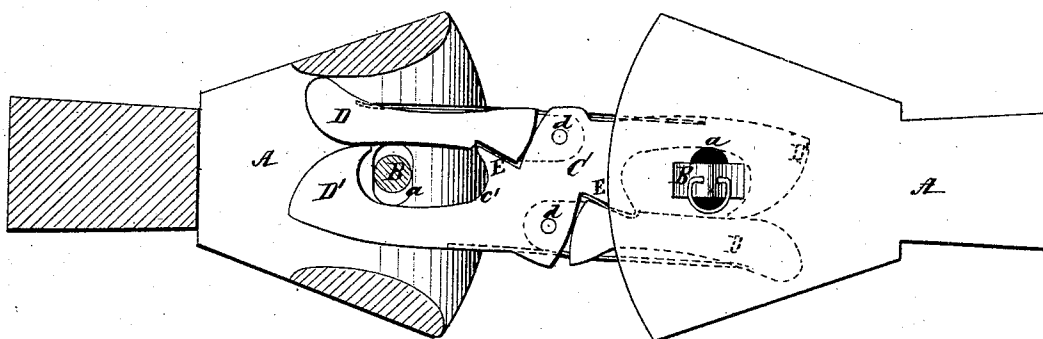
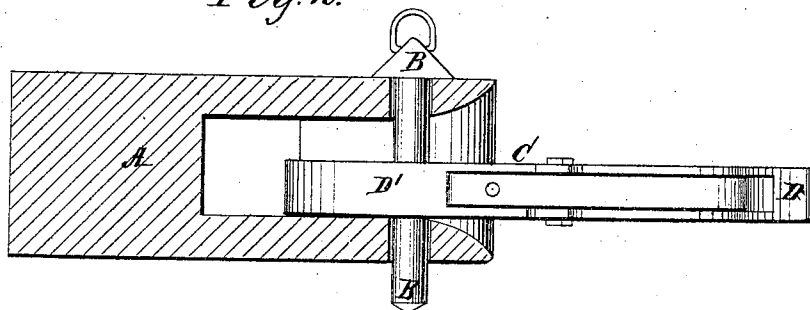


Fig. 2.



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UNITED STATES PATENT OFFICE.

FRANK A. MARKLEY, OF WAYNESBOROUGH, VIRGINIA.

IMPROVEMENT IN CAR-COUPLING LINKS.

Specification forming part of Letters Patent No. **146,926**, dated January 27, 1874; application filed August 8, 1873.

To all whom it may concern:

Be it known that I, FRANK A. MARKLEY, of Waynesborough, in the county of Augusta and State of Virginia, have invented a new and Improved Car-Coupling; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a top view, partly in section. Fig. 2 is a central vertical section of one draw-head.

The invention relates to car-couplings generally, but more particularly to that class of them in which a link with spring-grapple at each end is employed. The invention consists in pivoting the spring-catches to the hook-piece as nearly as possible in the same transverse median plane, in order to shorten the coupling-link, and allow the cars to come as closely together as possible. It also consists in arranging a projection at one side of the rear concavity of link-slot, so as to arrest any lateral pressure of pin against the spring-latch, and thereby prevent any chance of accidental uncoupling. It also consists in using slight side latches, and thus throwing the main weight and strength of the metal into that part of the link which is expected to take the strain.

In the drawing, A A are two draw-heads, beveled on the inner edges of mouth and provided with coupling-pin B. C is the coupling-link, provided at each end with the hook D' to catch around the pin. The openings in rear of hook are covered by spring-latches D D, that turn upon pivots *d d* nearly or exactly in the same transverse median plane.

In other couplings of this kind, the spring latches or jaws have been pivoted in transverse planes at some distance from each other. This

necessarily lengthened the coupling and prevented the cars from coming close together.

E is a rigid lateral guard, extending out from the concavity *c'*, against which the pin rests to prevent the strain from being brought to bear against the spring-latch, and thereby allowing the escape of the pin. The hooks D' D' are made in one solid piece, while they, as well as the spring-jaws, are reversible in position, to form a universal link that will work equally well no matter how placed in the draw-head.

By using a simple and single side latch, I am enabled to give great strength to the hook-body where comes all the strain. This cannot be done in the link with spring-jaws that divide the link equally through the middle.

The draw-head has transverse slots *a a* respectively at top and bottom to receive the coupling-pin and allow it lateral play, whereby the draw-head may be made considerably smaller and less expensive.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A coupling-link having the spring-jaws D D pivoted in the same transverse plane, as and for the purpose described.

2. The link D', having the projecting guards E arranged to one side of the concavity *c'*, as and for the purpose set forth.

3. The one-piece solid hooks D' D', provided with a single spring-catch on each reverse side, to allow the strength of the iron to be thrown into the link-body that bears the strain, in the manner specified.

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Witnesses:

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