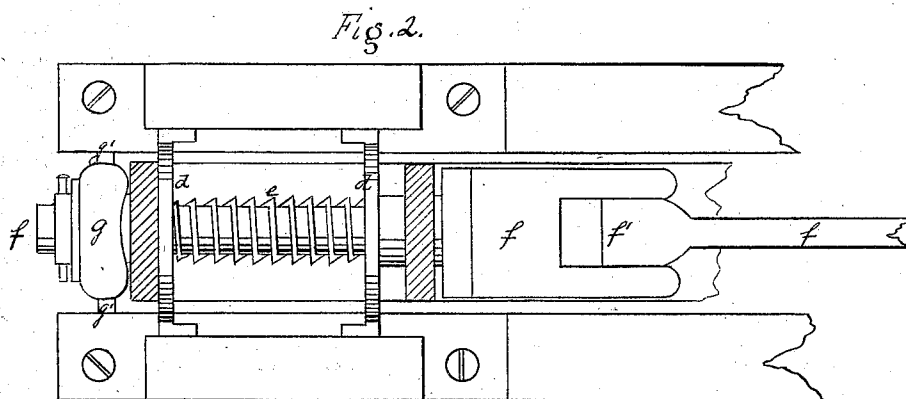
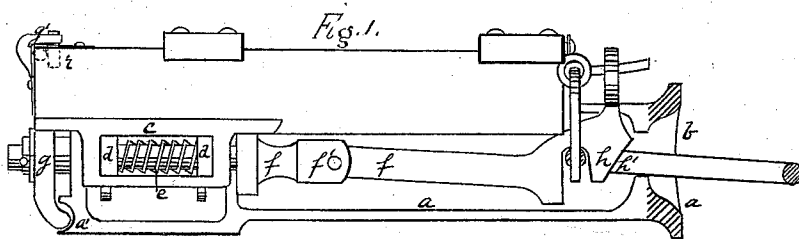


W. D. RINEHART.

Car-Couplings.

No. 150,715.

Patented May 12, 1874.



WITNESSES

James L. Kay
Hugh Snigg

INVENTOR

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UNITED STATES PATENT OFFICE.

WILLIAM D. RINEHART, OF ALLEGHENY CITY, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **150,715**, dated May 12, 1874; application filed March 6, 1874.

To all whom it may concern:

Be it known that I, WILLIAM D. RINEHART, of Allegheny City, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Draw-Head; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side view of my improved draw-head and the timbers to which it is attached; and Fig. 2 is a bottom view of the rear end, partly in section.

Like letters of reference indicate like parts in each.

My invention consists of a bar having the link-attachment at its forward end, extending longitudinally through the head and attached to a swinging arm, lever, or other suitable device, operating against the head to give to it an accelerated motion when the pressure is applied to the link, so that it shall advance and take up the slack between two adjacent heads.

To enable others skilled in the art to make and use my invention, I will describe its construction and mode of operation.

Heretofore the draft has always been on the head *a*. I make a head, *a*, of the usual form, having a bell-mouth, *b*, a pocket, *c*, containing the follower-plates *d* and draft-spring *e*. Extending longitudinally through the head *a* is a bar, *f*, which I term the draw-bar. The front end of the draw-bar *f* is fitted with a hook, *h*, or any other suitable coupling device. When the hook *h* is used I hinge the forward end of the bar, as at *f'*, so that, when the link strikes the

incline *h'*, it may throw up and couple automatically. The rear end of the draw-bar *f* is secured in a vibrating frame or lever, *g*, which is hung to the timbers at *g'*, and at its lower end bears against the head at *a'*. In front of the pivots of the lever *g* I insert a piece of rubber, *i*, or other elastic packing, to receive and take up the jar.

The operation of this apparatus is as follows: The link being inserted, the draft is upon the draw-bar *f*. This bar, operating upon the swinging arm or lever *g*, draws it forward. As the lower end of the lever is a greater distance from its center or pivoting point, it is evident that the movement at that point will be much greater than at the point where the draw-bar is attached. This causes the head *a* to advance so as to meet the opposite head and take up the slack between the cars. The instant the draft ceases the spring *e* throws the head back to its proper position.

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

A bar, *f*, having the link attachment at its forward end, extending longitudinally through the head *a* and attached at its rear end to a pivoted bar, the outer end of which presses against the head so that, when the draft is on the link, the head is caused to advance to take up the slack, all combined as described.

In testimony whereof I, the said WILLIAM D. RINEHART, have hereunto set my hand.

WILLIAM D. RINEHART.

Witnesses:

T. B. KERR,
JAMES I. KAY.