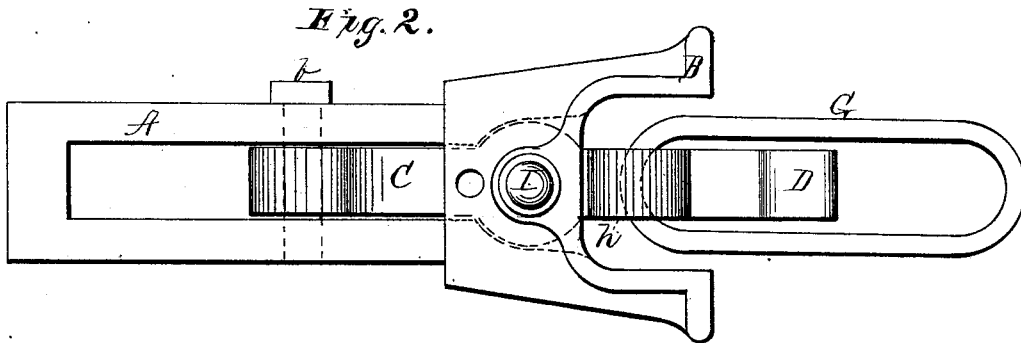
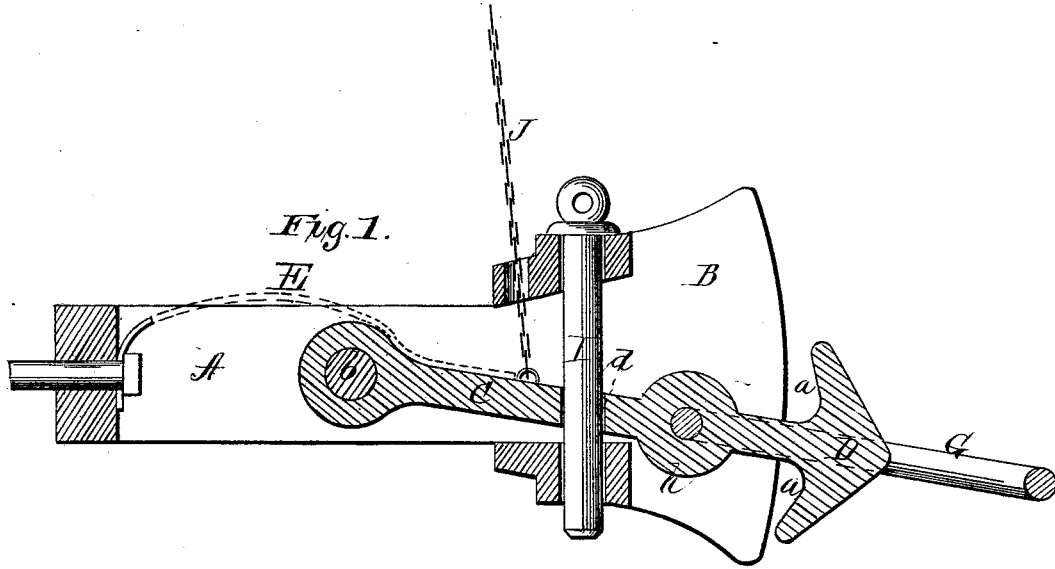


G. BOWER.
CAR-COUPLING.

No. 189,689.

Patented April 17, 1877.



WITNESSES
Frank L. Ozard.
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INVENTOR
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UNITED STATES PATENT OFFICE.

GEORGE BOWER, OF CATASAUQUA, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPINGS.

Specification forming part of Letters Patent No. **189,689**, dated April 17, 1877; application filed March 9, 1877.

To all whom it may concern:

Be it known that I, GEORGE BOWER, of Catasauqua, in the county of Lehigh and in the State of Pennsylvania, have invented certain new and useful Improvements in Automatic Car-Coupler and Buffer; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification.

The nature of my invention consists in the construction and arrangement of a car-coupling, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section of my car-coupling. Fig. 2 is a plan view of the same.

A represents the draw-bar, of any suitable dimensions, provided at its front end with the head B, which is open at top and bottom from the extreme front backward for a suitable distance.

In the draw-bar A is pivoted the bar C, having a spear-shaped head, D, at its front end, forming hooks *a a* at top and bottom. The coupling-bar C is pivoted by a horizontal bolt, *b*, and moves up and down at its front end, and it is held down by means of a spring, E, as shown by dotted lines in Fig. 1; or it may simply fall by its own gravity.

In coupling two cars together having this coupling, the heads D D of the coupling-bars engage with each other, one on top of the other; and all lateral motion of the coupling-bars is prevented by the inner ends of said bars fitting closely within the draw-bar, while at the same time they are allowed to play up and down.

The interior of the head B is made wider than the thickness of the coupling-bar C, to allow for the passage of a coupling-link, G, which is passed horizontally through the coupling-bar C, as shown.

At this point the said coupling-bar is formed with a swell, *h*, on top and bottom, to strengthen the same where the link passes through.

Back of the swell *h* the coupling-bar C is formed with a lateral swell, *d*, having a central perforation for the passage of an ordinary coupling-pin, I, which passes also through the top and bottom of the draw-head.

By thus constructing the coupling-bar C a car having this coupling may be coupled to a car having the ordinary coupling, either by the use of the link G, pivoted in the coupling-bar, or by the common link held in the draw-head by the pin I. This is especially of importance on freight-cars, and my coupling can thus be connected to any car, and of whatever height the same may be.

The peculiar formation of the head B admits of the link G being applied to the coupling-bar, and of both having all the play necessary.

J is a chain, attached to the coupling-bar, and passing up through the top of the draw-head, for uncoupling my car-coupling.

This chain is intended to be connected to a pivoted lever in such a manner that by a simple movement of the lever the head D will be raised, and disengage itself from the other head.

This coupling may be made of cast or wrought iron, or of both combined, and it may be used on any and all kinds of railroad-cars.

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

1. The coupling-bar C, constructed as described, with head D, forming hooks *a a*, and formed with the swell *h* with link G passing through the same, and with the swell *d*, for the passage of the coupling-pin I, substantially as herein set forth.

2. The draw-bar A, provided with the open head B, constructed substantially as shown, in combination with the coupling-bar C, having the link G passing through a swell, *h*, thereon, as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of March, 1877.

GEO. BOWER.

Witnesses:

FRANK GALT,
C. L. EVERT.