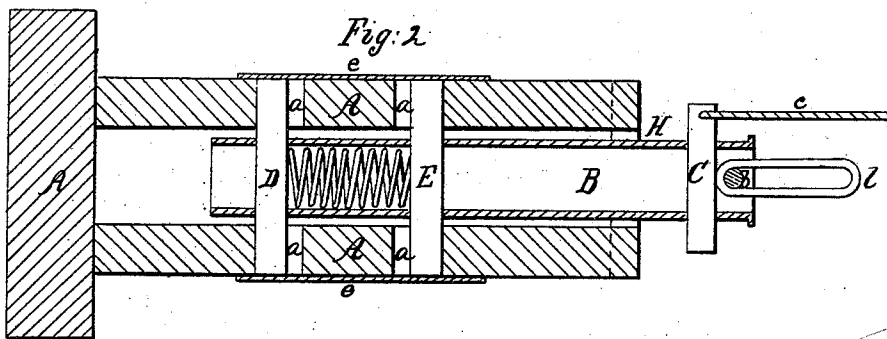
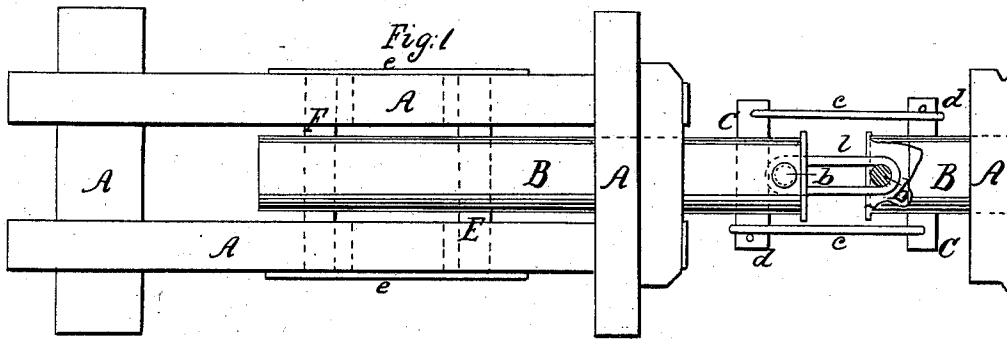


F. A. HULL.
CAR COUPLING.

No. 79,982.

Patented July 14, 1868.



Witnesses
H. Bruns.
M. L. Benton

Inventor
F. A. Hull
by Coburn Marsh

UNITED STATES PATENT OFFICE.

F. A. HULL, OF BELVIDERE, ILLINOIS.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. 79,982, dated July 14, 1863.

To all whom it may concern:

Be it known that I, FREDERICK A. HULL, of Belvidere, in the county of Boone and State of Illinois, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare and make known that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form part of this specification.

My said invention consists in constructing the draft-iron or draw-heads of car-couplings of a tubular form, whereby the greatest degree of strength of the metal is obtained, and in combining therewith various appliances, producing a strong, simple, and safe coupling for railroad-cars, as hereinafter more fully described.

To enable those skilled in the art to understand how to construct and use my said invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 is a plan or top view of my invention, and Fig. 2 is a horizontal longitudinal central section of the same.

Similar letters of reference in the different figures denote the same parts of my invention.

A represents the frame-work, of timber, in which the tubular draft-iron B is secured, and whereby it is attached to the car, as hereinafter explained. Through the said draft-iron pass two metallic bars, D and E, whose ends rest in slots *a* in the frame A, as seen in Fig. 2, said tube B resting upon a suitable support

at the front end of the frame A, as seen at H. Within said tubular draft-iron, and between the bars D E, is arranged a spiral spring, S, or its equivalent, so that when the draft is applied to draw the car it comes upon the rear end of the spring S, and when the cars are backed or run together the concussion comes upon the front end of the spring S, the slots *a* aforesaid being arranged with respect to the bars D and E to operate in that manner.

C represents a bar passing through the front end of the draft-iron, one end of which is provided with links *c*, the opposite end of which links may be slipped over the corresponding end of the corresponding bar in the opposite draft-iron, where it may be secured by means of pins *d*, as shown, *l* being the main link, and *b* the ordinary coupling-pin. By this arrangement when the coupling pin or link is broken or lost one or both of the auxiliary links may be used, and if used in conjunction with the principal link and pin, should either be broken while the train is in motion, the others will prevent the separation of the train, as desired.

Having described the construction and operation of my invention, I will proceed to specify what I claim and desire to secure by Letters Patent:

The combination of the tubular draft-iron B, the bars D E, the spring S, and the link *l* and pin *b*, arranged and operating substantially as specified and shown.

F. A. HULL.

Witnesses:

W. E. MARRS,
L. L. COBURN.