

W. DUESLER.  
CAR-COUPLING.

No. 191,522.

Patented June 5, 1877.

Fig. 1.

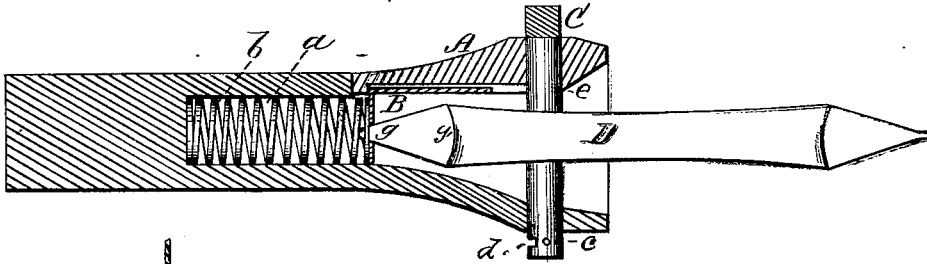


Fig. 2.

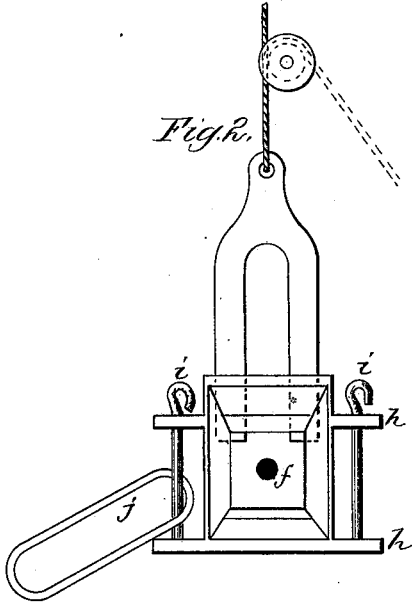


Fig. 3.

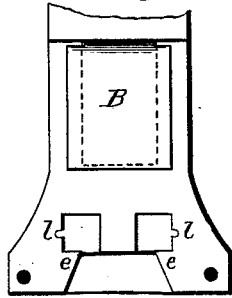


Fig. 4.

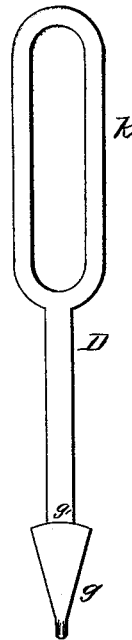
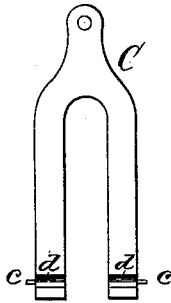


Fig. 5.



WITNESSES

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# UNITED STATES PATENT OFFICE.

WILLIAM DUESLER, OF ST. JOSEPH, MISSOURI.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **191,522**, dated June 5, 1877; application filed April 14, 1877.

*To all whom it may concern:*

Be it known that I, WILLIAM DUESLER, of St. Joseph, in the county of Buchanan and State of Missouri, have invented a new and valuable Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a longitudinal vertical section of my invention. Fig. 2 is an end view of the same; Fig. 3, a top-plan view, with the top removed. Fig. 4 is a view of the connecting bar or link; Fig. 5, a side elevation of the double bolt.

This invention has relation to car-couplers; and the object and purpose of the same are to construct a coupler simple in its parts and effective in its operation in automatically coupling the cars, the construction and combination of the several parts being hereinafter described, and subsequently pointed out in the claims.

In the accompanying drawings, A represents the draw-head, having a suitable chamber, *a*, for the reception of a coiled spring, *b*, the front end bearing against one end of an angular plate, B. The horizontal portion of this plate serves to retain the vertical end at all times in an upright position, and also acts as a guide in the movement of the plate, as well as to hold the double bolt up in place.

Passing through the head A is a double bolt, C, carrying guide-pins *c*, and has grooves *d*. This bolt, it will be noticed, when down in position, draws or bears against shoulders *e*, upon the sides of the draw-head, and, therefore, secures it against bending. A suitable hole, *f*, is made in the plate B to receive the pointed end *g* of a coupling link or bar, D.

The draw-head A is formed with flanges *h*, through which pass pins *i*, and are used in connection with a link, *j*, for coupling where the bars are of the old style. I, however, provide my improved coupling-bar with a link, *k*, at one end, so that when required, in

cases where one or more cars have not my draw-head, these bars may be used.

The operation of my coupler will be readily understood from the following description:

When it is desired to couple the cars, the bar D being already connected to the opposite draw-head, the pointed end *g* enters the hole *f*, and forces the angular plate B, with spring *b*, forward a distance sufficient to disengage the horizontal part of the angular plate B, with the recesses *d*, upon the lower ends of the double bolt C, when the link, from its own weight, will fall in place, the shoulders *g'*, formed upon the bar D, preventing the same from being withdrawn.

When it is desired to uncouple the cars, the bolt is raised up until the recesses *d* thereon are in line with the horizontal part of the plate B, when the spring *b* will force it into said recesses, and holds the bolt up in place.

The pins *c* serve to guide the bolt C in its movement by means of vertical slots or grooves *l*, in which they fit, and the pins also act as stops to prevent the bolt from being drawn too far up.

If desired, a chain or cord may be connected to the double bolt, and passing over suitable pulleys secured to the front end of the car, and the chain or cord running to the side thereof, by which the car can be uncoupled from the side or from the top, and the bolt can be raised to uncouple the cars at any distance without bending or otherwise injuring the bolt, as the shoulders *e* and guide-pins *c* serve to prevent the bolts from bending.

A coupling constructed according to my invention is exceedingly simple in its parts, as well as durable and effective in its operation, and, as the parts are few, there is less liability of its getting out of order.

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

1. The draw-head A, with spring *b*, and angular plate B, having opening *f* passing through it, in combination with the link or bar D, formed with conical head *g*, and shoul-

ders *g'*, substantially as and for the purpose set forth.

2. The combination, with the angular plate B, having opening *f*, and the spring *b*, of the link or bar D, constructed as described, and the double bolt C, with recesses *d* and pins *c*, to guide said bolt in its movement within the recesses *d*, and also to act as stops, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM DUESLER.

Witnesses:

J. L. HANNA,  
E. S. DOUGLAS.