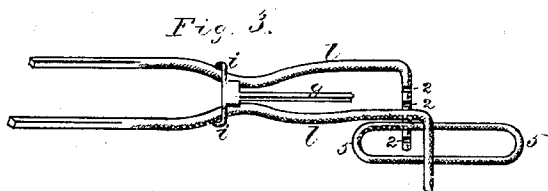
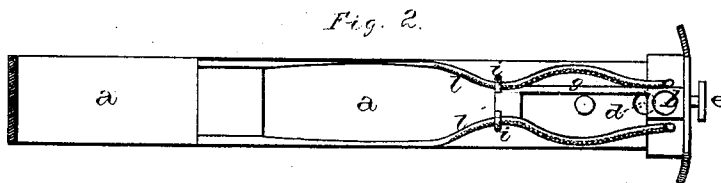
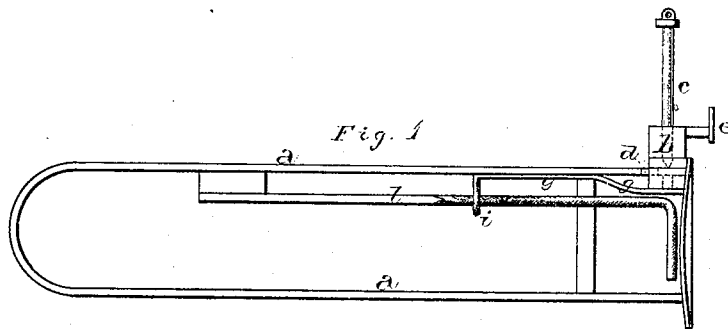


J. C. MALOY.
Car-Couplings.

No. 145,067.

Patented Dec. 2, 1873.



WITNESSES.
Wm. Hale
Wm. J. Murphy

INVENTOR.
J. C. Maloy
per
T. A. Lehmann atty

UNITED STATES PATENT OFFICE.

JAMES C. MALOY, OF JOHNSTOWN, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **145,067**, dated December 2, 1873; application filed November 20, 1873.

To all whom it may concern:

Be it known that I, JAS. C. MALOY, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

The nature of my invention relates to an improvement in car-couplings; and it consists in the combination of a buffer, which projects beyond the front end of the draw-head, with a pair of springs having downwardly-turned notched ends for carrying the coupling-link, the parts being so connected that when the buffer is pushed backward it compresses the two springs, so as to make them close upon the link and hold it at any desired height, as will be more fully set forth hereafter.

Figure 1 is a side elevation of my invention. Fig. 2 is a horizontal section of the same. Fig. 3 is a perspective of the two springs holding the link.

a represents an ordinary draw-head, of any desired construction, to which my invention is applied. Upon the front end of this head is bolted the sliding clasp or collar *b*, having an opening through its center, in which the pin *c* is placed, ready to be coupled, and which carries the pin backward with it, so that it can fall through the opening *d* when the cars come together. Projecting outward from this collar, in front of the head *a*, is a buffer, *e*, by means of which the collar *b* is moved backward, either from the pressure of the hand in setting the link ready to couple, or when pressed backward by the buffer on the head of the opposite car. To the under side of this collar is

secured a lever, *g*, which extends backward along the under side of the top of the head, and which has a pair of sliding hooks, *i*, or other suitable devices, which catch over the tops of the two springs *l*, and, acting on their curved surfaces, press them together at their front ends. These springs consist of long bent bars of steel, and have their front ends bent downwardly, as shown in Figs. 1 and 3, and have a number of notches, *2*, formed upon their inside surfaces, in which the coupling-link *5* is caught and held in any desired position, ready to couple with the next car. One of the draw-heads has the buffer pushed back until the pin falls, and in pushing the buffer back the two springs are made to close upon the link, as shown in Fig. 3, which can be adjusted up and down to suit any height of cars to which it may be desired to couple. When the cars do come together the buffers strike, and the one which is projecting forward is pressed back far enough to let its pin fall, and the cars are thus coupled automatically together.

These devices form an attachment which can be secured to any draw-head in use by the aid of a single bolt without any cutting or fitting of parts.

Having thus described my invention, I claim—

The combination, in the draw-head *a*, of the sliding collar *b*, buffer *e*, lever *g*, hooks *i*, and springs *l*, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of November, 1873.

J. C. MALOY.

Witnesses:

F. A. LEHMANN,
W. HALE.