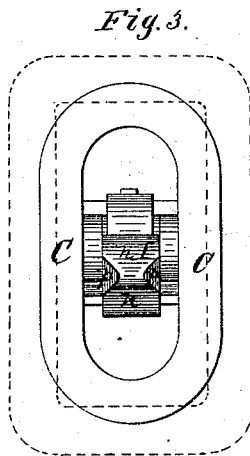
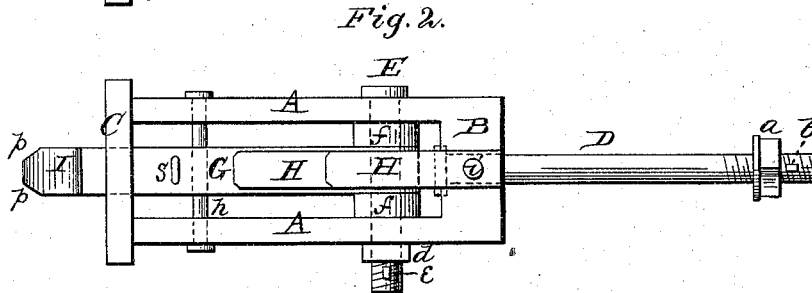
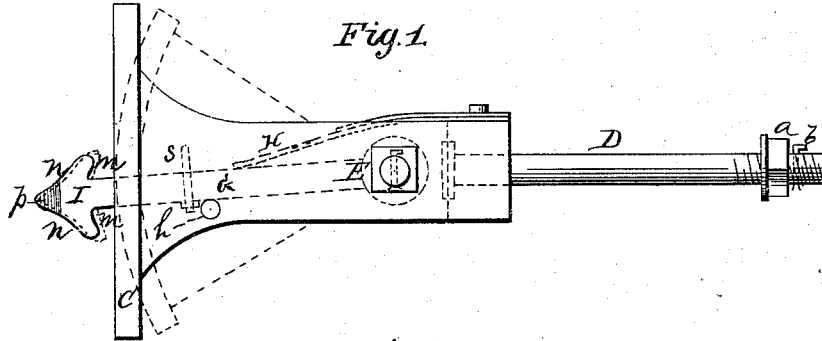


F. H. D. NEWHARD.

CAR-COUPLING.

No. 182,466.

Patented Sept. 19, 1876.



WITNESSES
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UNITED STATES PATENT OFFICE.

FRANKLIN H. D. NEWHARD, OF HOKENDAUQUA, ASSIGNOR OF TWO-THIRDS OF HIS RIGHT TO GEORGE BOWER, OF CATASAUQUA, AND BENJAMIN B. LYNN, OF BETHLEHEM, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 182,466, dated September 19, 1876; application filed August 24, 1876.

To all whom it may concern :

Be it known that I, FRANKLIN H. D. NEWHARD, (assignor to himself, GEORGE BOWER, and BENJ. B. LYNN, each one-third,) of Hokendauqua, in the county of Lehigh, and in the State of Pennsylvania, have invented certain new and useful Improvements in Self Car-Couplings and Buffers; 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 a 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 side elevation of my car-coupling. Fig. 2 is a plan view, and Fig. 3 a front view, of the same.

The draw-head is composed of two side pieces, A A, connected at the rear ends by a cross-piece, B, and at the front by the buffer C, leaving the top and bottom of the draw-head open. Through the back piece B of the draw-head is passed the bolt D, around which the usual buffer-spring is to be placed. On the end of the bolt D is placed the nut *a*, which is locked by a key, *b*, as shown. G represents the draw-bar, formed with an eye at its rear or inner end, and pivoted by means of a bolt, E, passing through said eye and the sides A A of the draw-head, and this bolt is provided on the end with a nut, *d*, and key *e*. On each side of the draw-bar G, on the bolt E, is placed a washer, *f*, to fill up the spaces on the bolt between the draw-bar and the draw-head sides A, and thus prevent any lat-

eral movement of the draw-bar. The draw-bar rests upon a pin or bolt, *h*, passed through the sides A, and held down thereon by means of one or more springs, H, which are fastened by a set-screw, *i*, on top of the rear end of the draw-head. The front end of the draw-bar G is provided with a spear-shaped head, I, forming top and bottom hooks *m m* at the rear. The top and bottom sides *n n* are made concave, as shown in Fig. 1, and the sides *p p*, at the extreme front end of the head, are beveled.

In coupling the cars one draw-bar will slide up on top of the other until their heads interlock, the springs H keeping them close together. On the upper side of the draw-bar is a staple, *s*, or its equivalent, for connecting the uncoupling-levers.

The draw-bars are made of such length that they can under no circumstances catch on the bottom edges of the opposite buffers. If, however, greater play is required for the draw-bars, so that they must be made longer, then the buffers have to be made on a circle, as shown by dotted lines in Fig. 1.

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

The combination of the draw-head A B, open at top and bottom, the buffer C, the gravity draw-bar G, with head I, provided with top and bottom hooks *m m*, top and bottom concaves *n n*, and side bevels *p p*, horizontal pivoting-bolt E, and stop-bolt *h*, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of August, 1876.

FRANKLIN H. D. NEWHARD.

Witnesses:

C. E. W. NEWHARD,
R. CLAY HAMERSLY.