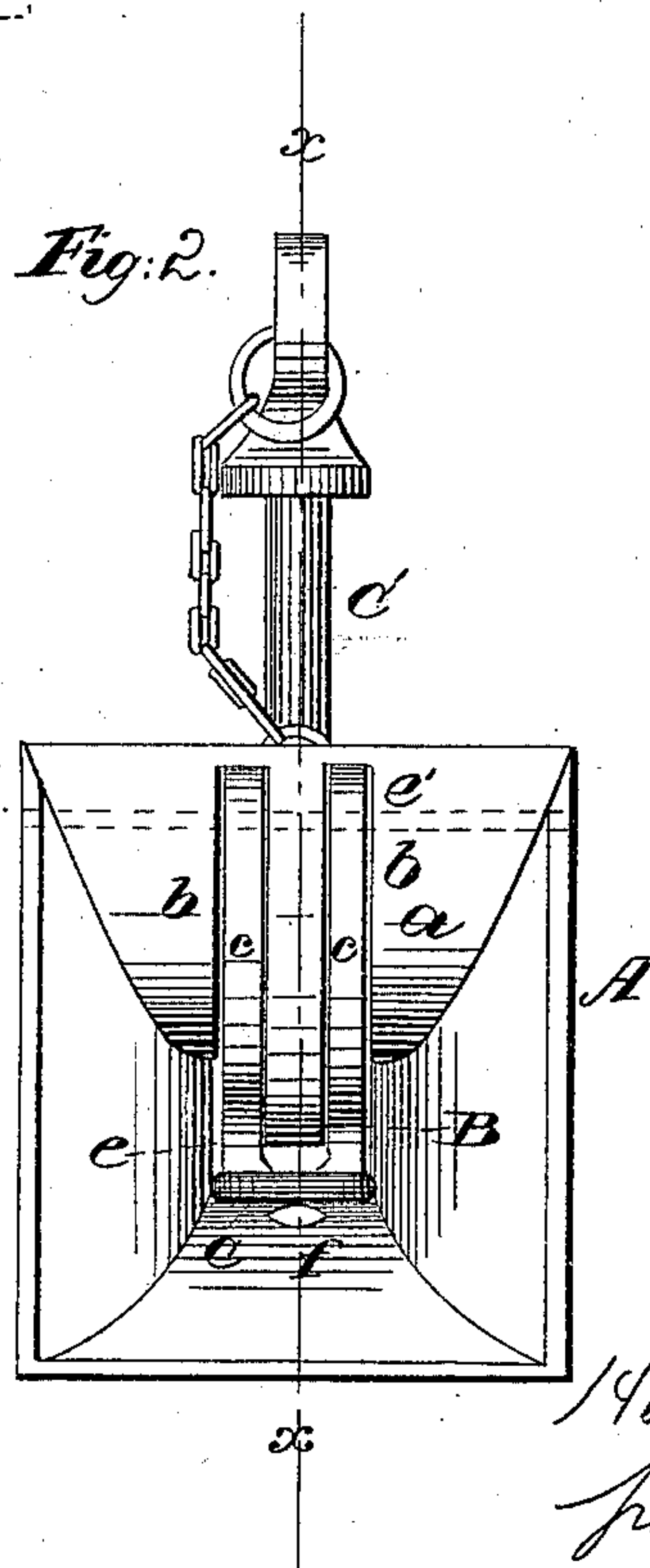
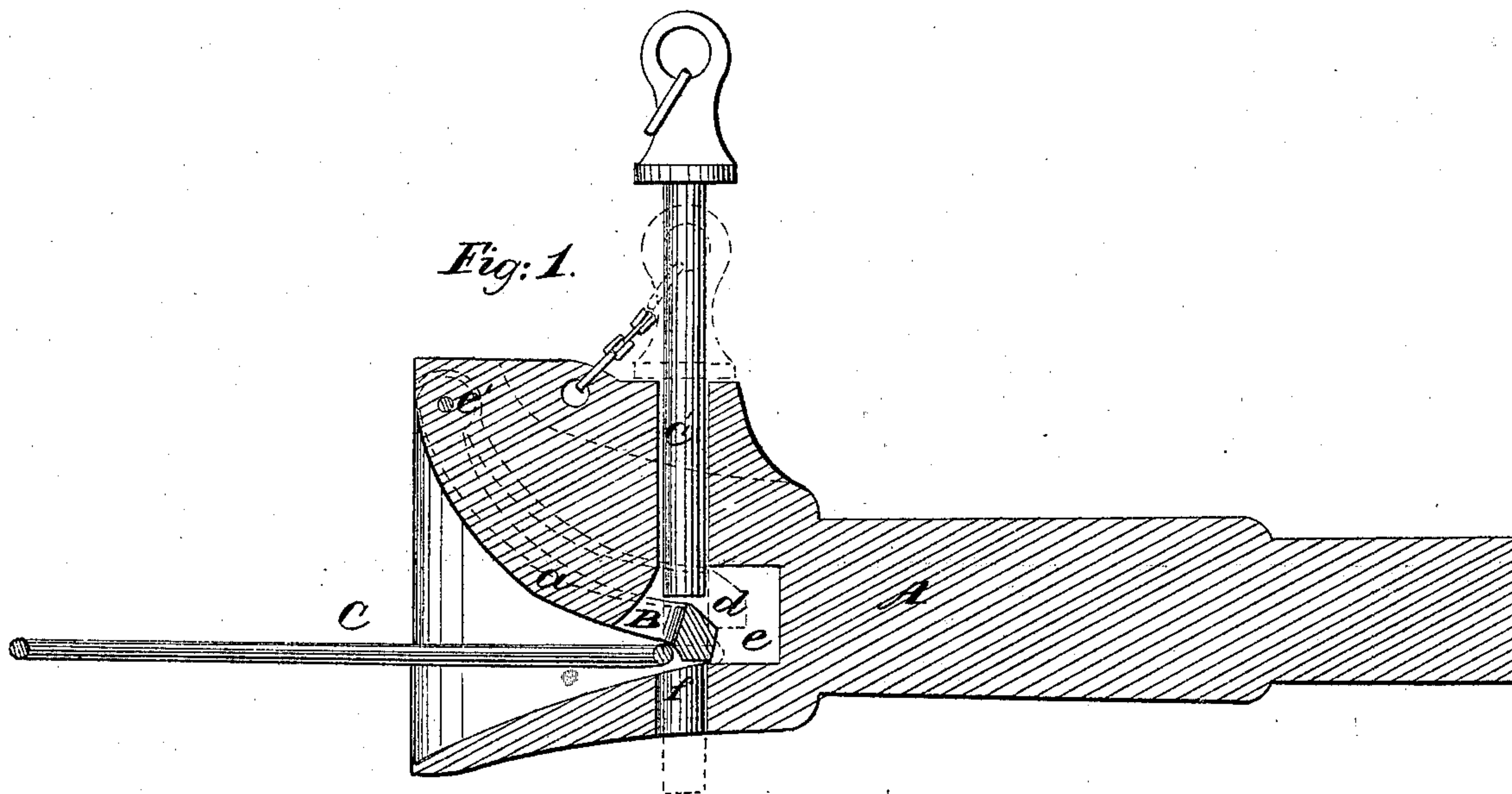


H. A. BUCK.  
Car Coupling.

No. 42,343.

Patented Apr. 19, 1864.



Witnesses;  
J. W. Coombs  
Geo. W. Reed

Inventor  
Henry A. Buck  
per Munn & Co  
attorneys

# UNITED STATES PATENT OFFICE.

HENRY A. BUCK, OF MEADVILLE, PENNSYLVANIA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 42,343, dated April 19, 1864.

*To all whom it may concern:*

Be it known that I, HENRY A. BUCK, of Meadville, in the county of Crawford and State of Pennsylvania, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a front view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to a new and improved car-coupling of that class which are commonly termed "self-coupling;" and it consists in the employment or use of a suspended drop placed within the draw-head and arranged in such manner as to support the coupling-pin when the latter is set or adjusted for coupling, and at the same time so arranged as to be out of the way of the link or shackle when the latter enters the draw-head, and prevented from being acted upon by the link or shackle until the latter reaches the proper point to receive the coupling-pin, thereby avoiding a casual dropping of the coupling-pin before the link or shackle can receive it.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a draw-head, which may be constructed in the usual way and provided with a flaring mouth or front, the upper surface, *a*, of which is of curved form and has two grooves or recesses, *b b*, made lengthwise in it to receive the two prongs *c c* of a drop, B, the lower ends of said prongs being connected by a cross-head, *d*, which extends across the opening *e*, into which the link or shackle C passes. The upper end of the prongs *c c* are fitted and allowed to swing freely on a transverse pin, *e'*, in the upper part of the draw-head A, and said prongs are curved to correspond with the curvature of the upper surface, *a*, of the mouth of the draw-head.

This drop B may be formed out of a single piece of metal, if preferable or desired, and the cross-head *d* is directly in line with the hole *f*, in which the coupling-pin C' is fitted.

This coupling-pin is arranged in the usual way, and the cross-head *d* of the drop B will rest, by virtue of its own gravity, on the bottom of the opening *e*, and will support the coupling-pin, as shown clearly in Fig. 1, preventing it from dropping down through the draw-head. When, however, the link or shackle C enters the draw-head, the former will strike the cross-head *d* and raise the drop B, and, owing to the manner in which said drop is hung, the cross-head moves upward in the arc of a circle and beyond the lower end of the pin C, which, when free from the cross-head, drops through the link or shackle and forms the connection between the draw-head and the link or shackle.

When the cross-head *d* supports the coupling-pin C', the prongs *c c* are within the grooves or recesses *b b*, and the link or shackle, therefore, is prevented from casually striking said prongs and liberating the pin before the link or shackle reaches the proper point to receive it. This is an important feature of the invention, for if the prongs *c c* were exposed at the front part of the mouth of the draw-head the pin C' would frequently be dropped before the link or shackle could receive it, and the coupling of the cars not effected.

I do not claim, broadly, a support for a coupling-pin to be acted upon by the link or shackle in entering the draw-head, for that is an old device; but

I do claim as new and desire to secure by Letters Patent—

The drop B, curved and fitted in grooves or recesses in the draw-head A, as shown, in connection with the coupling-pin C' and link or shackle C, all arranged to operate substantially as and for the purpose specified.

HENRY A. BUCK.

Witnesses:

JOSHUA DOUGLASS,  
F. P. RAY.