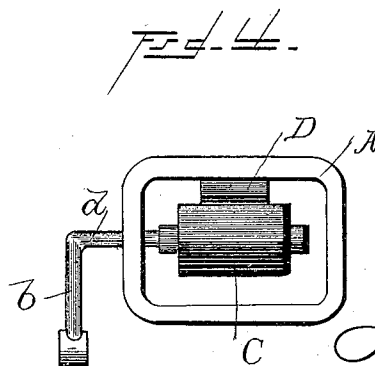
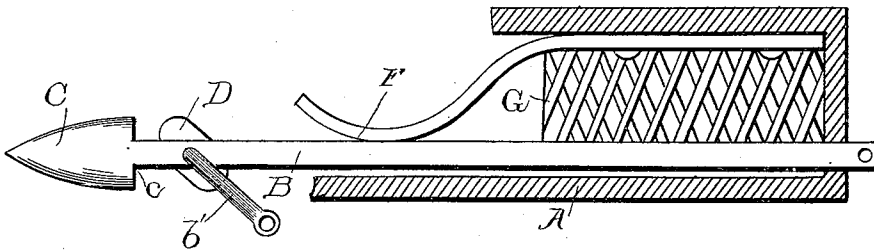
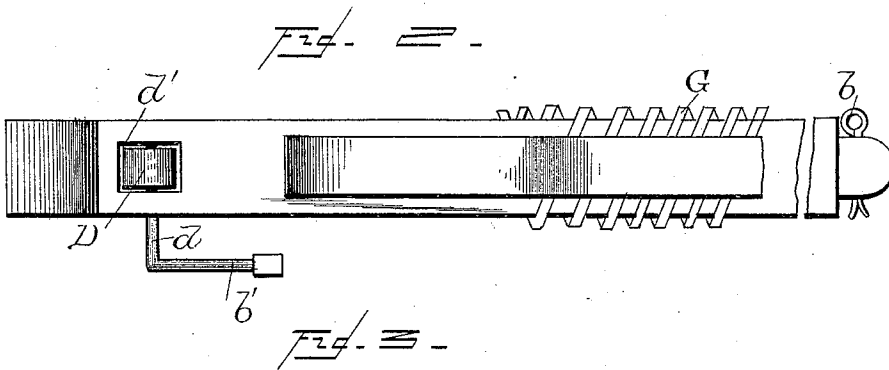
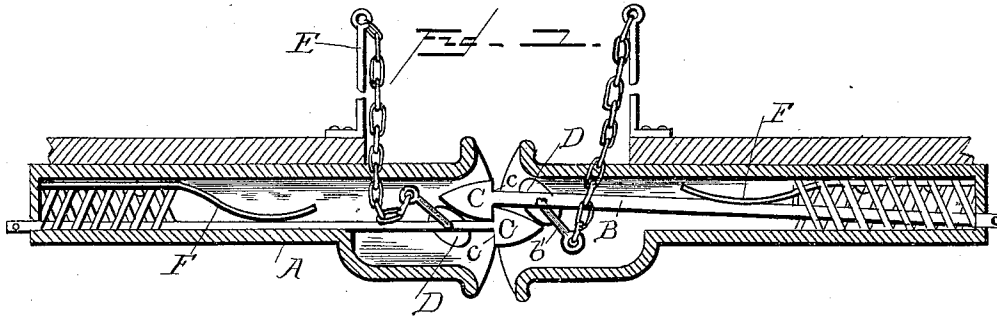


(No Model.)

J. KINDLEBERGER.
CAR COUPLING.

No. 481,907.

Patented Aug. 30, 1892.



Witnesses
A. P. Schwartz
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UNITED STATES PATENT OFFICE.

JEFFERSON KINDLEBERGER, OF SAN DIEGO, CALIFORNIA, ASSIGNOR TO
MILTON S. BABCOCK, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 481,907, dated August 30, 1892.

Application filed May 27, 1890. Renewed April 13, 1892. Serial No. 428,983. (No model.)

To all whom it may concern:

Be it known that I, JEFFERSON KINDLEBERGER, a citizen of the United States, and a resident of the city and county of San Diego, State of California, have invented new and useful Improvements in Car-Couplings; and I hereby declare that the following is a clear, full, and exact description of the invention, that will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in car-couplings, the object of which is to make it possible to add my improvements to the ordinary draw-head now in common use, as will be hereinafter fully described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal section of two draw-heads, showing my coupler applied thereto. Fig. 2 is a top plan view of the tongue. Fig. 3 is a side elevation of the tongue and connecting parts. Fig. 4 is an end view of the draw-head showing my improvements secured therein.

Referring in detail to the various parts of my invention, A is the draw-head, which is constructed in the usual manner or any preferred style and provided with the interior throat or hollow space, in which is arranged the tongue B, having a sufficient length to reach from the outer to and through the rear end of the draw-head, as shown in Fig. 1. The outer end of the tongue is provided with the arrow-shaped head C, having the angular shoulders c, which form the engaging-surface of the coupler when in use. The rear end of the tongue passes entirely through the inner end of the draw-head and is there secured by the bolt b, as shown in Fig. 2. The shoulders c are on a line with the outer surface of the draw-head.

In order to efficiently control the coupler, I mount in the tongue B the oblong cam D, the plane of whose body is normally at an angle of about forty-five degrees with the plane of the tongue, and as each of the tongues are thus equipped with cams pivotally secured in the opening b' it will be readily understood that their office is to separate the ends of the tongues when they are joined together by the angular shoulders c, as shown

in Fig. 1. The cams D are controlled by the transverse shaft d, having the upwardly-reaching arm d', preferably connected by a chain to the standard E, erected to the upper side of the draw-head or upon the edge of the platform of the car, as preferred. The tongue B normally lies upon the floor of the opening in the draw-head and is held in this position by the spring F, the inner end of which is suitably secured to the upper side of the interior of the draw-head, while its end is properly bent to rest against the tongue when the same is resting upon the lower surface of the throat of the draw-head.

In operation the cars provided with my coupler are brought together in the usual manner, and when so brought together the tongues B with their pointed ends engage with each other, either of which may pass on top of the other until the upper one shall drop down behind the shoulders c, when the coupling is effected. It will be seen that the cam of one tongue is in an operative position against the head of the other tongue, and by a pull of the chain attached to the arm d' said cams will so act upon the heads that they will readily and easily separate the same and will thus uncouple the cars. The draw-head is provided in the usual manner with the buffer or cushion springs G.

It will be seen that I have provided a simple and effective means for efficiently attaching one car to another, which also enables the operator to readily uncouple the same, and believing that further description is unnecessary for a clear comprehension of the various details, I will now specifically set forth my claims.

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

1. A car-coupler consisting of the draw-head A, the arrow-headed tongues secured therein, the cams mounted in said tongues and operated by the arm d', the spring F, secured to the upper side of the draw-head and arranged to hold the tongue against the lower side of the draw-head, substantially as described.

2. The combination of the draw-head, the tongues passing through the same and se-

cured at its inner end by the bolt *b*, as shown, while the other end thereof is provided with the pointed ends having the shoulders *c*, the cams mounted in the tongues near the head
5 thereof, the arm *b'*, connected with the standard E by the operating-chain, and the spring F, secured to the upperside of the draw-head, as set forth.

10 3. The combination, with a railway-car, of the draw-head A, provided with the tongue B, the spiral spring G, the oblong cam D, pivotally mounted in the tongue and adapted to press against the head of the other tongue and

thus separate the heads thereof, the spring F, secured to the inner side of the draw-head 15 and pressing downwardly against the tongue, the transverse shaft *d*, and the arm *b'*, adapted to actuate the cam, substantially as described.

In witness whereof I have hereunto set my 20 hand and seal.

JEFFERSON KINDLEBERGER. [L. S.]

Witnesses:

A. B. SMITH,

A. J. SCHWARTZ.