

(No Model.)

E. P. EASTWICK, Jr.
CAR COUPLING.

No. 454,722.

Patented June 23, 1891.

Fig. 1.

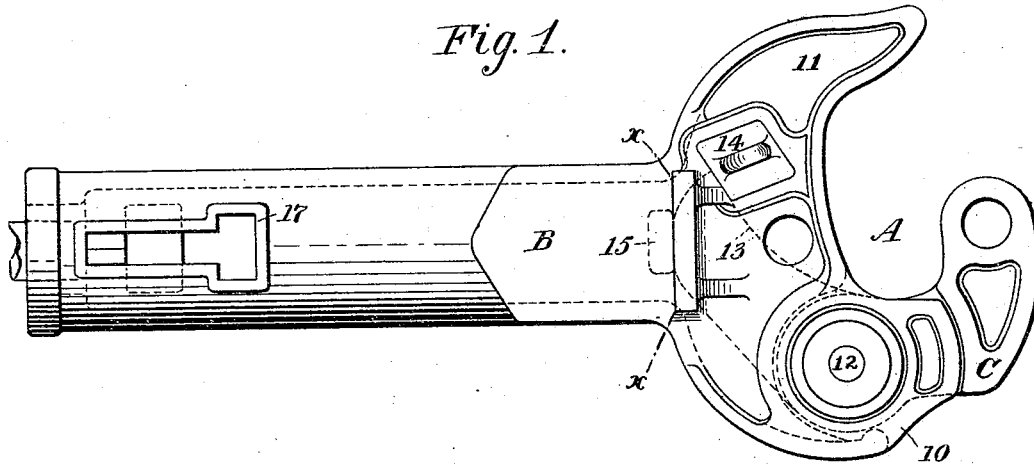


Fig. 2.

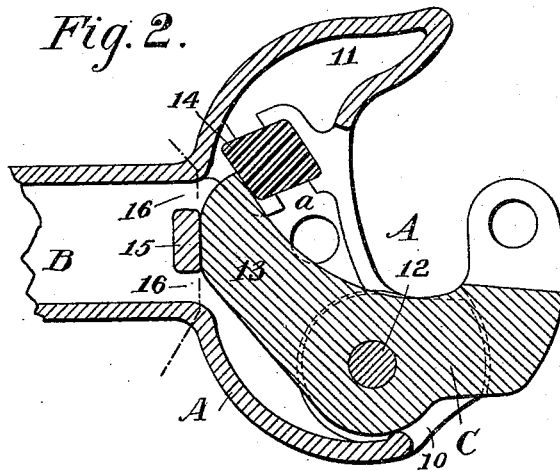
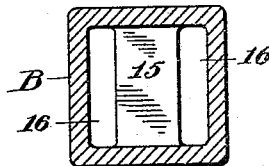


Fig. 3.



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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 454,722, dated June 23, 1891.

Application filed January 23, 1891. Serial No. 378,762. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. EASTWICK, Jr., of New York city, in the county and State of New York, have invented a new and useful Improvement in Car-Couplers, of which the following is a full, clear, and exact description.

My invention relates to car-couplers of the vertical plane type, and has for its object to provide the draw-head with a buffing plate or pin virtually integral therewith adapted to sustain the buffing strain of the knuckle, and which, if desired, may be made of a harder metal than that employed in the construction of the draw-head.

A further object of the invention is to so locate the pin or plate that a space will intervene between its side edges and the opposed faces of the draw-head shank, whereby the buffing plate or pin may be inserted when the draw-head is cast and the head and shank be continuously and conveniently cored.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of a coupler having my improvements applied. Fig. 2 is a partial horizontal section through the coupler, and Fig. 3 is a transverse section on the line *x x* of Fig. 1.

The coupler consists, primarily, of a draw-head A, having an attached shank B and a knuckle C. The draw-head is constructed as is usual in couplers of this class, being made essentially hollow, whereby an open chamber *a* is obtained, adapted to receive the knuckle and provided with two arms 10 and 11. The knuckle is pivoted in the arm 10 of the draw-head by means of a pin 12, and is provided with a wing 13, capable of extending over the center line of the head and engaging with a locking-pin 14, preferably removable, and a buffing plate or pin 15. The arm 11 is closed and forms a horn which acts as a guiding plane for directing the opposed knuckle of

an opposite coupler to bring the two knuckles into an engagement and effect the self-locking of the same. The pivot-pin 12 is located at one side of the center line of the draw-head, the locking-pin being usually at the opposite side of the line, and the buffing pin or plate 15 is located near or at the junction of the head, with its shank preferably on the center line of the draw-head.

In the operation of coupling the wing of the knuckle bears at its inner side upon the locking-pin and at its outside on the buffing plate or pin, all the pulling strain being received by the former and the buffing strain by the latter.

The buffing plate or pin may be made of steel or of other material of approximately the same hardness as the knuckle, and is permanently fixed in the draw-head during the process of casting. The buffing plate or pin is connected with opposite walls of the draw-head shank and is preferably given a vertical position. The pin or plate is of less width than the width of the draw-head shank or space in which it is located, whereby spaces 16 are formed between its side edges and the opposing faces of the shank, as is best illustrated in Fig. 3; but if in practice it be found desirable the pin or plate may be located close to or integral with one side of the shank, in which event a single space 16 only is obtained.

By reason of the improved construction above described the shank and draw-head may be cored together in the process of manufacture, and a buffing-surface is obtained, which materially strengthens the shank and is capable of sustaining a severe frictional contact of the knuckle with safety for a prolonged period. At the inner end of the shank slots 17 are produced in opposite sides to facilitate the attachment of the tail-bolt; but this feature constitutes no portion of the present application, having been described and claimed in an application filed at even date herewith.

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

1. In a car-coupler of the type described, a draw-head provided with a fixed buffing pin

or plate integral therewith, located near the center of a space at or near the junction of the head with its shank, the said pin or plate being of less width than the space, whereby a
5 core-opening or core-openings are formed at the side or sides of the plate.

2. In a car-coupler of the type described, a fixed buffing-plate located in a draw-head in the path of the rearward travel of the coupling-knuckle, the said buffing-plate being
10 made of a harder metal than that of which the draw-head is constructed and adapted to limit the movement of the coupling-knuckle of the coupler in one direction, substantially
15 as described.

3. In a car-coupler of the type described, a draw-head provided with a fixed buffing plate or pin of harder metal than that of which the draw-head is constructed, located near
20 the center of a space at or near the junction of the head with its shank, the said pin or plate being of less width than the space, whereby a core-opening or core-openings are formed at the side or sides of the plate, as
25 and for the purpose specified.

4. In a car-coupler of the type described, the combination, with a draw-head and its rotating knuckle, of a buffing plate or pin made of harder metal than the draw-head, inserted and firmly fixed in the said draw-head,
30 substantially as and for the purpose set forth.

5. In a car-coupler of the type described, the combination, with a draw-head and a buffing plate or pin of less width than the space in which it is inserted, the said plate or
35 pin being inserted and fixed in the draw-head at the time of casting, of a locking-pin located in the draw-head at one side of the center line, a knuckle pivoted in the said draw-head at the opposite side of the said center
40 line, and a wing integral with the knuckle, engaging at its inner face with the locking-pin and at its outer face with the buffing plate or pin, all combined for operation substantially as and for the purpose specified.

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Witnesses:

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