No. 703,256. Patented June 24, 1902.

T. HARRISON.

ATTACHMENT FOR CAR COUPLINGS.

(Application filed Jan. 28, 1902.)

(No Model.)

Fig. 1.

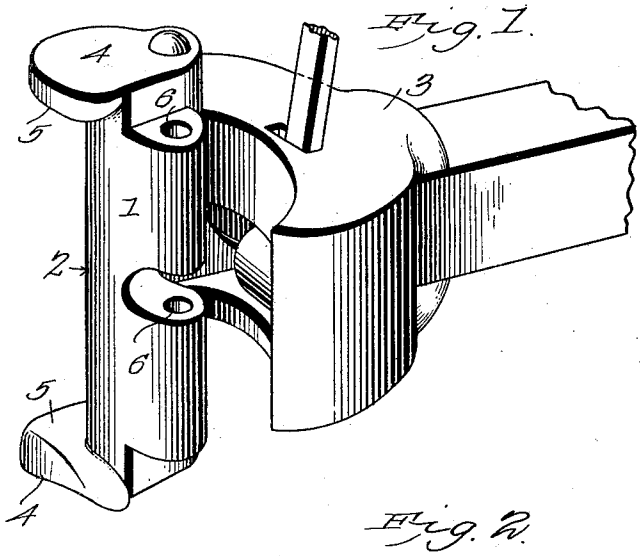


Fig. 5.

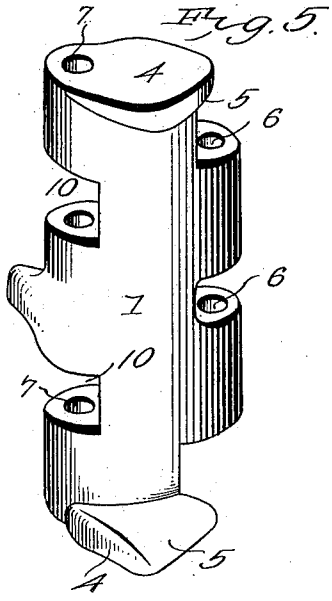


Fig. 2.

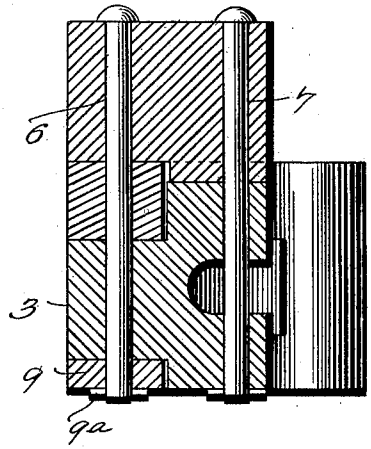


Fig. 3.

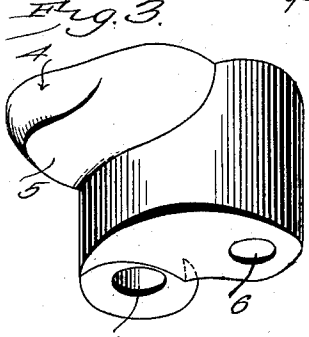
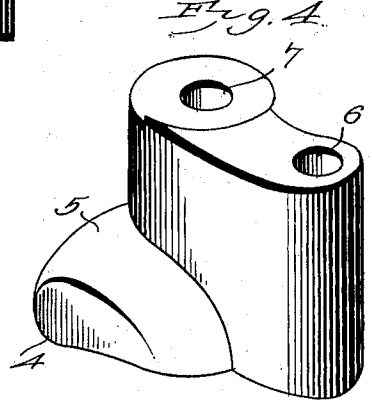


Fig. 4.



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UNITED STATES PATENT OFFICE.

THOMAS HARRISON, OF BOWLING GREEN, OHIO.

ATTACHMENT FOR CAR-COUPLINGS.

SPECIFICATION forming part of Letters Patent No. 703,256, dated June 24, 1902.

Application filed January 28, 1902. Serial No. 91,638. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HARRISON, a citizen of the United States, residing at Bowling Green, in the county of Wood and State of Ohio, have invented a new and useful Attachment for Car-Couplings, of which the following is a specification.

The invention relates to an attachment for car-couplings.

The object of the present invention is to provide for car-couplings having pivoted knuckles a simple, inexpensive, and efficient device adapted to be readily applied to a car-coupling and capable of effectually preventing the same from dropping to the track should the draw-head or draw-bar become detached from the draft mechanism and pull out of a car.

A further object of the invention is to provide a device of this character which will move with the pivoted knuckle when the same opens and closes and which will not interfere with the automatic coupling of cars or with the uncoupling of the same.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a detail perspective view of the attachment which is applied to the top of the knuckle. Fig. 4 is a similar view of the attachment which is located at the bottom of the knuckle. Fig. 5 is a perspective view of a knuckle having the upper and lower safety devices or attachments.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates an attachment consisting of a block or body substantially the same shape in cross-section as the knuckle 2 of a draw-head 3 and designed to be arranged at the top and bottom of the car-coupling, as illustrated in Fig. 1 of the drawings; but a pair of draw-heads may, if desired, be provided either at the top or bottom with the attachment. The attachment is provided at its outer horizontal face with a projecting flange or portion 4, adapted to form a support for another draw-head should the same become loose or detached from its car. The supporting-flange 4, which is adapted to prevent a draw-head from dropping to the track when pulled out of its car, is approximately triangular in plan view and is provided with a rounded abutting face 5, as clearly illustrated in Figs. 3 and 4 of the drawings. A pair of attachments is preferably employed for each car-coupling, and they are adapted to be readily transferred from one car-coupling to another, but cannot be changed from the top of one draw-head to the bottom thereof, for the reason that they would have to be inverted to arrange the flange at the outer end or bottom, and such reversal would change the direction or curve of the attachment.

The attachment is provided at its inner and outer sides with vertical openings 6 and 7, conforming to the configuration of and adapted to aline with the vertical openings of the draw-head and knuckle. The knuckle-pin, which pivots the knuckle to the draw-head, is extended and passes entirely through the attachment and is provided at its lower end with a nut 9 and a transverse pin or key 9^a for retaining it in the alined openings of the attachment, the draw-head, and the knuckle. The engaging portion of the knuckle is provided with a link-receiving recess 2^a, and the corresponding portions of the upper and lower attachments are provided with recesses 10 to reduce the size of the coupling-pin for connecting the knuckle to an ordinary link. The perforations 7 of the attachments register with the coupling-pin perforation at the engaging portion of the knuckle, and the said recesses 10 reduce the size of the attachment at the outer or engaging portion of the knuckle. The attachments may be secured to the knuckle in any suitable manner, and a coupling pin or bolt may be arranged permanently but removably in the perforations 7 and the corresponding perforation of the knuckle to secure the attachment in place and also to enable a link to be connected to the draw-head.

When two draw-heads are coupled and the attachments are in position, their flanges project over the draw-heads and beneath the

same, and should either draw-head become disconnected from the draft mechanism and pull out of its car it will be supported by the attachments, which will prevent it from dropping to the track and wrecking or otherwise injuring any of the cars of the train. The abutting faces of the attachments conform to the configuration of the adjacent portions of the draw-head, and the said attachments, which may be constructed separate from the knuckles, can be formed integral therewith, and consist of extensions of the engaging portion of the knuckle, as illustrated in Fig. 1 of the drawings.

It will be seen that the attachment is exceedingly simple and inexpensive in construction, that it possesses great strength and durability, and that it is capable of effectually preventing a draw-head from dropping to the track should it become disconnected from the draft mechanism and pull out of its car.

What I claim is—

1. The combination with a draw-head, and a knuckle provided with inner and outer perforations, of a removable attachment or safety device conforming to the configuration of the car-coupling and provided with vertical openings forming continuations of the openings of the knuckle, said attachment being also provided adjacent to the engaging portion of the knuckle with a recess, a continuous knuckle-pin passing through the attachment, the draw-head and the knuckle, and a vertical pin connecting the outer portion of the attachment to the outer portion of the knuckle, substantially as described.

2. The combination with a draw-head and a knuckle having a perforation at its outer end, of the safety device provided at its outer end or face with a projecting flange approximately triangular and having a rounded abutting face, said attachment being provided with openings forming continuations of the openings of the knuckle, and pins arranged in the said openings and securing the safety device to the knuckle and pivoting the latter to the draw-head, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS HARRISON.

Witnesses:

CHARLES T. POPE,

ROBERT WALLACE.