

No. 629,923.

Patented Aug. 1, 1899.

J. D. ROCHE.
SAFETY DEVICE FOR CAR COUPLINGS.

(Application filed Mar. 13, 1899.)

(No Model.)

Fig. 1.

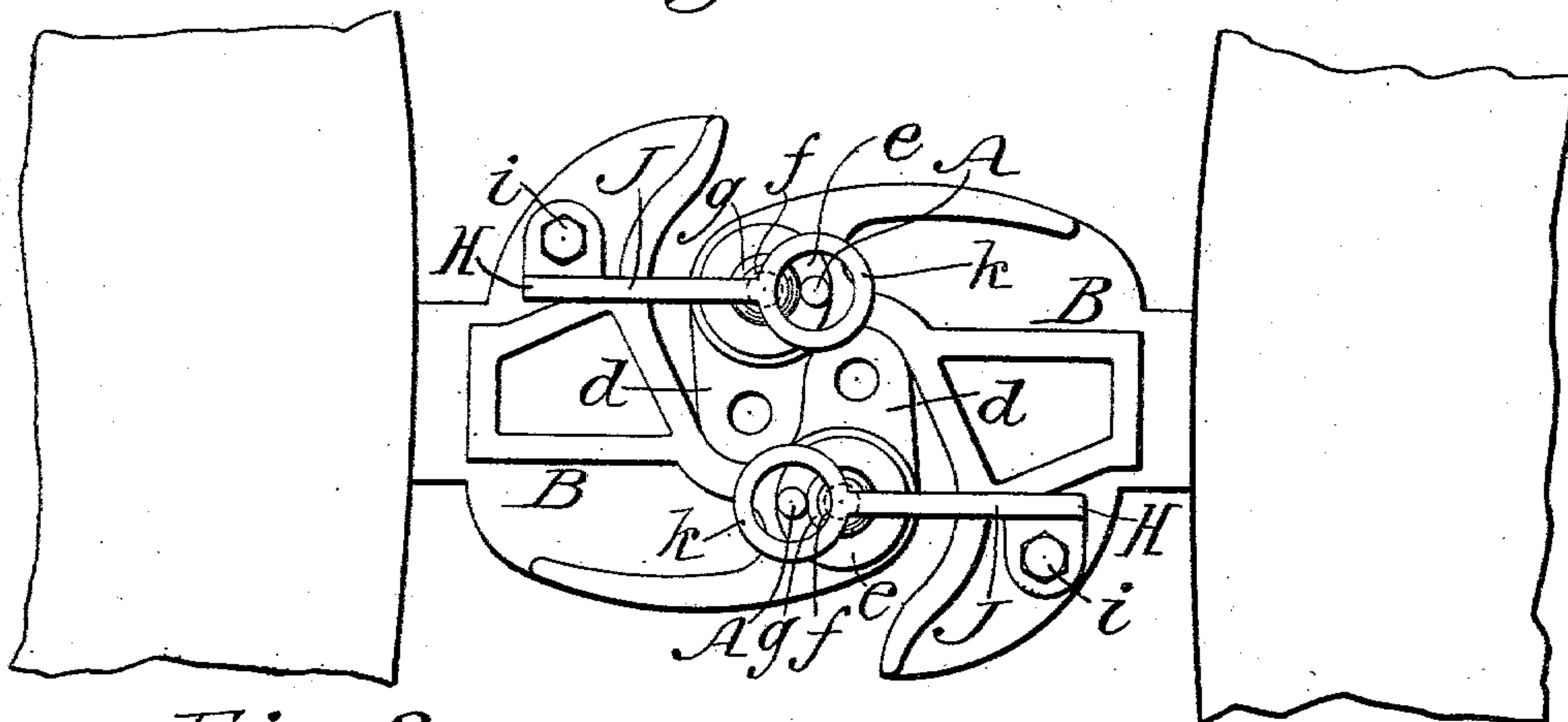


Fig. 2.

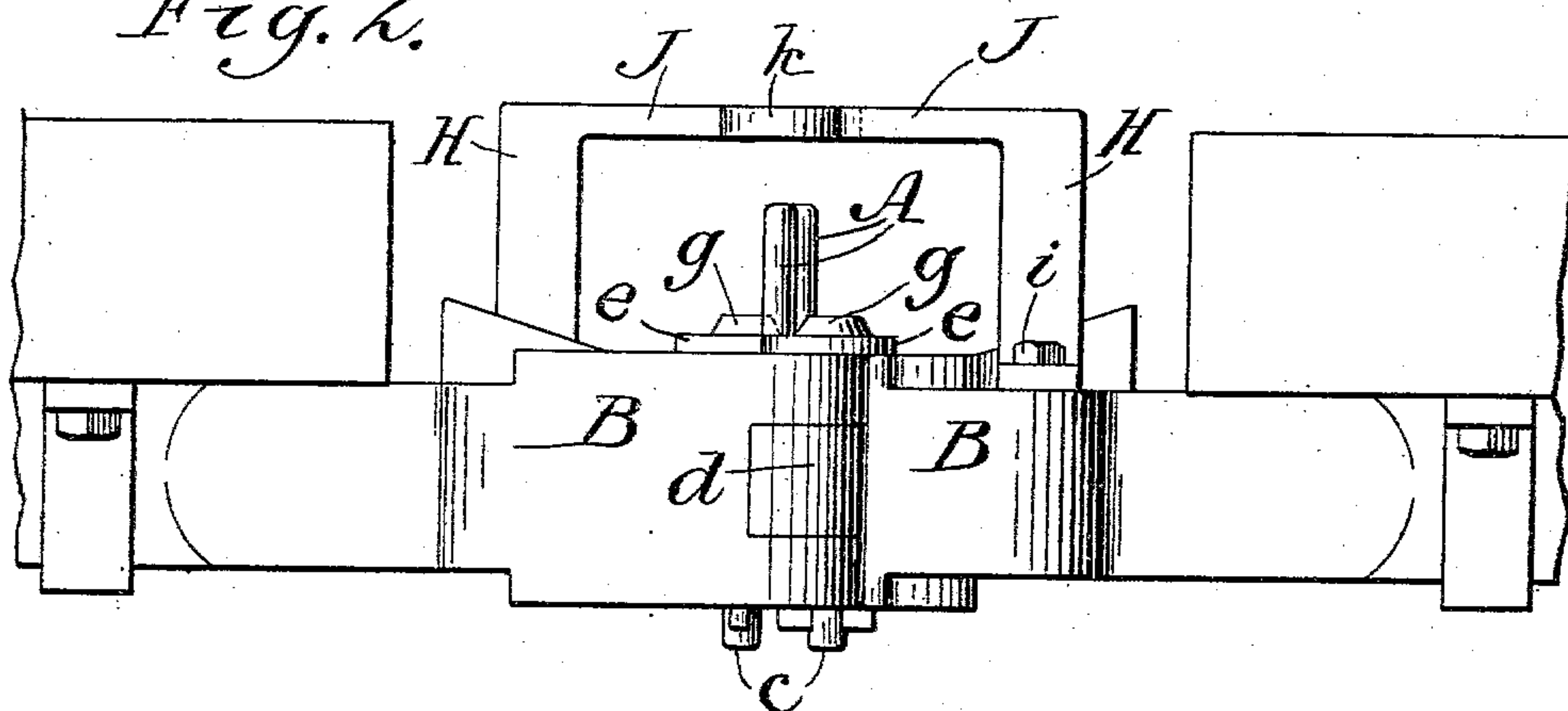
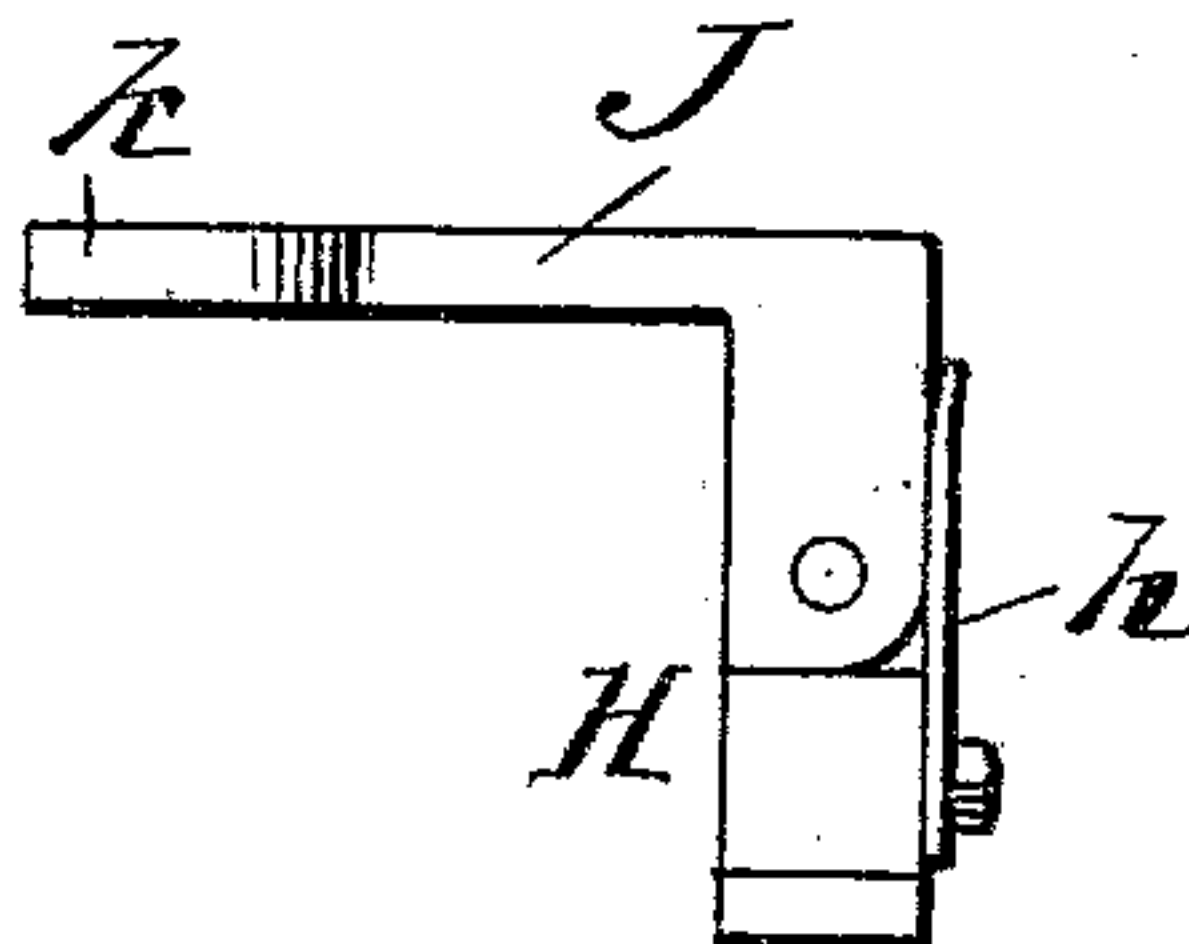


Fig. 3.



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SAFETY DEVICE FOR CAR-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 629,923, dated August 1, 1899.

Application filed March 13, 1899. Serial No. 708,812. (No model.)

To all whom it may concern:

Be it known that I, JOHN DANIEL ROCHE, a citizen of the United States, and a resident of the town of Union, county of Hudson, and State of New Jersey, have invented certain new and useful Improvements in Safety Devices for Car-Couplers, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to safety devices for car-couplers, and has for its object to provide simple and efficient means for preventing vertical disengagement of two interlocked coupler-heads if one of said heads should be disengaged from the car by breakage or other cause.

My invention is designed to obviate all danger of accident to cars in rear of a broken or disengaged coupler, by reason of the fact that with my improved safety device the broken or disengaged coupler-head will be supported by the adjoining coupler-head, and thus prevent it from falling beneath the cars.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view showing two interlocked couplers provided with my improved safety device. Fig. 2 is a side elevation of the same. Fig. 3 is a side elevation of a detail of my invention.

Referring to the drawings, A designates an upright or post, which is provided upon the top of the draw-head B. This post is preferably arranged at a point immediately in rear of the pivot-pin *c*, by which the knuckle *d* is pivotally connected to the jaw of the coupler-head when my improved safety mechanism is applied to car-couplers of the "twin-jaw" or "Janney" type. In this connection it will be noted that I have herein illustrated my invention in connection with a Janney-type coupler; but I do not restrict myself to such specific use, and it will be understood that the safety device will be applied to any form or type of coupler to which it is adapted. The post A is carried upon a horizontal base *e*, provided with an eye or opening *f*, through which the hinge-pin *c* is adapted to pass, the

relative construction and arrangement being preferably such that the head *g* of the pin *c* rests upon the base *e* and serves to retain the latter and its post A in connection with the draw-head and in normal position. I do not, however, desire to limit myself to this manner of securing the base and its post in position; but in couplers where no pivot or hinge pin is employed the base can be bolted or otherwise secured to the draw-head in any suitable or adapted manner.

H designates an upright which is secured by bolts, as at *i*, or in any other suitable manner, to the top of the draw-head B at a point in rear of and to one side of the post A. This post H carries a horizontal forwardly-projecting arm J, provided at its outer end with a ring or loop *k*, as shown. It will be understood that one post device A and one arm device J are provided upon each coupler-head, so that said devices upon the respective coupler-heads are relatively located opposite to each other on a transverse plane, as shown in Fig. 1 of the drawings. The ring or loop *k* therefore comes directly over the post A of the opposite draw-head when the parts are in normal position and the coupler-heads are interlocked. The projecting arm J can have a hinge connection with the post H, if desired, as illustrated by Fig. 3 of the drawings, so that the arm can be swung back out of operative position under any circumstances which would make this requisite, and it is maintained normally in horizontally-extended position by means of a plate-spring *h*.

The operation and advantages of my invention will be readily understood. The ordinary independent vertical movement of the coupler-heads is not interfered with; but should either coupler-head become accidentally disengaged from its car the same will drop until the ring *k* will encircle or engage the post A of the opposite coupler-head, and the disengaged coupler-head will thus be suspended and carried without danger of its falling on the road-bed or dropping beneath the cars.

I do not confine myself to the details of mere mechanical construction and design as herein shown and described, as it is obvious that under the scope of my invention I am entitled to structural variations.

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

1. As a means for preventing vertical dis-
5 engagement of car-couplers, the combination of an upright or post and a projected arm, said arm being provided with an end ring or loop, whereby the coupler may be suspended from the arm by means of an engagement of
10 said ring or loop with said upright or post, substantially as shown and described.

2. The combination with a car-coupler of the "twin-jaw" or "Janney" type, of an up-
right or post and a projected arm having an
15 end ring or loop adapted to engage an upright or post upon an opposite draw-head, the said parts being secured to the upper surface of the coupler, substantially as shown and described.

20 3. As a safety device for car-couplers, the combination of an upright or post carried by

a base-piece, and a projected arm carried by an upright and provided with an end ring or loop, the said parts being secured to the upper surface of the coupler, substantially as
25 shown and described.

4. As an improvement in safety devices for car-couplers, the combination, with an upright or post secured upon one coupler-head, of a projected arm secured upon the opposite
30 coupler-head, and adapted to engage said upright or post, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in pres-
35 ence of two witnesses, this 6th day of March, 1899.

JOHN DANIEL ROCHE.

Witnesses:

MARCELLA G. MACLEAN,
DUDLEY W. HAYNES.