

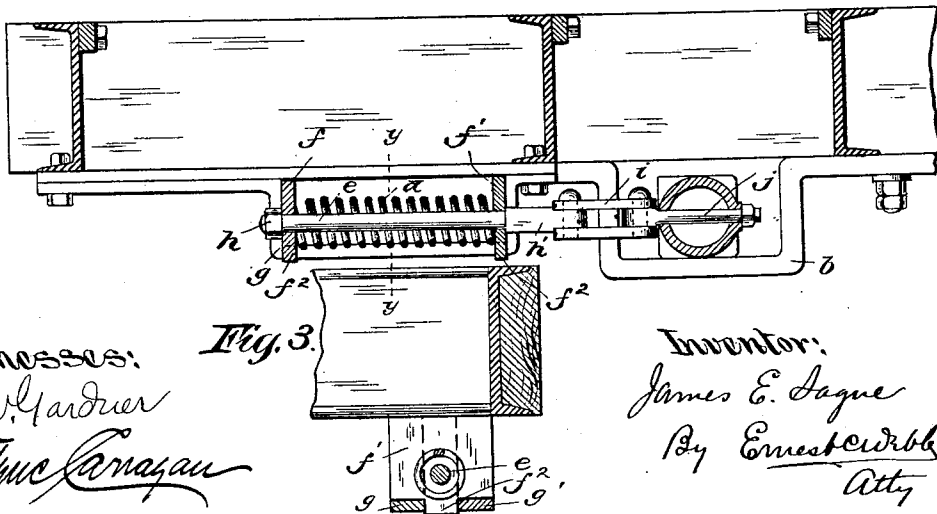
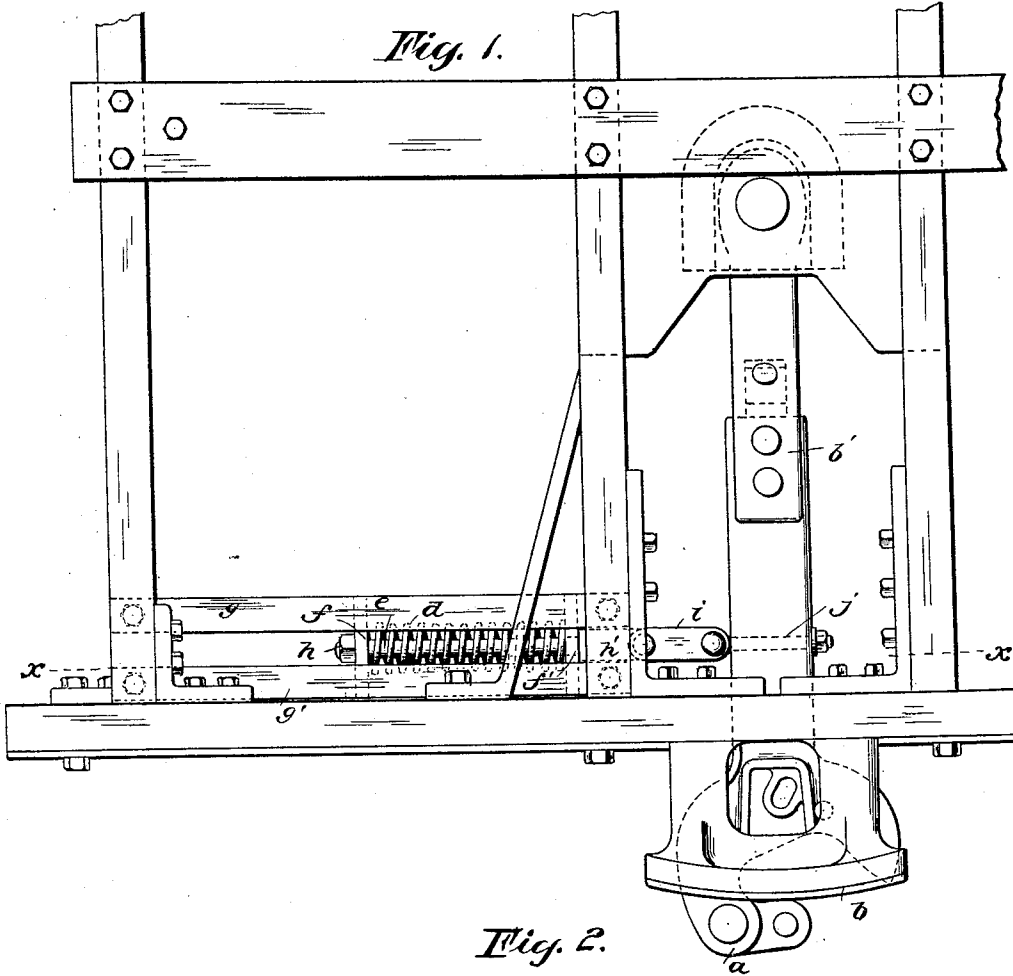
(No Model.)

2 Sheets—Sheet 1.

J. E. SAGUE.  
CAR COUPLING.

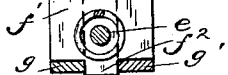
No. 480,628.

Patented Aug. 9, 1892.



Witnesses:  
*D. W. Gardner*  
*Arthur Canavan*

*Fig. 3.*



Inventor:  
*James E. Sague*  
 By *Ernest C. Webb*  
 Atty

(No Model.)

2 Sheets—Sheet 2.

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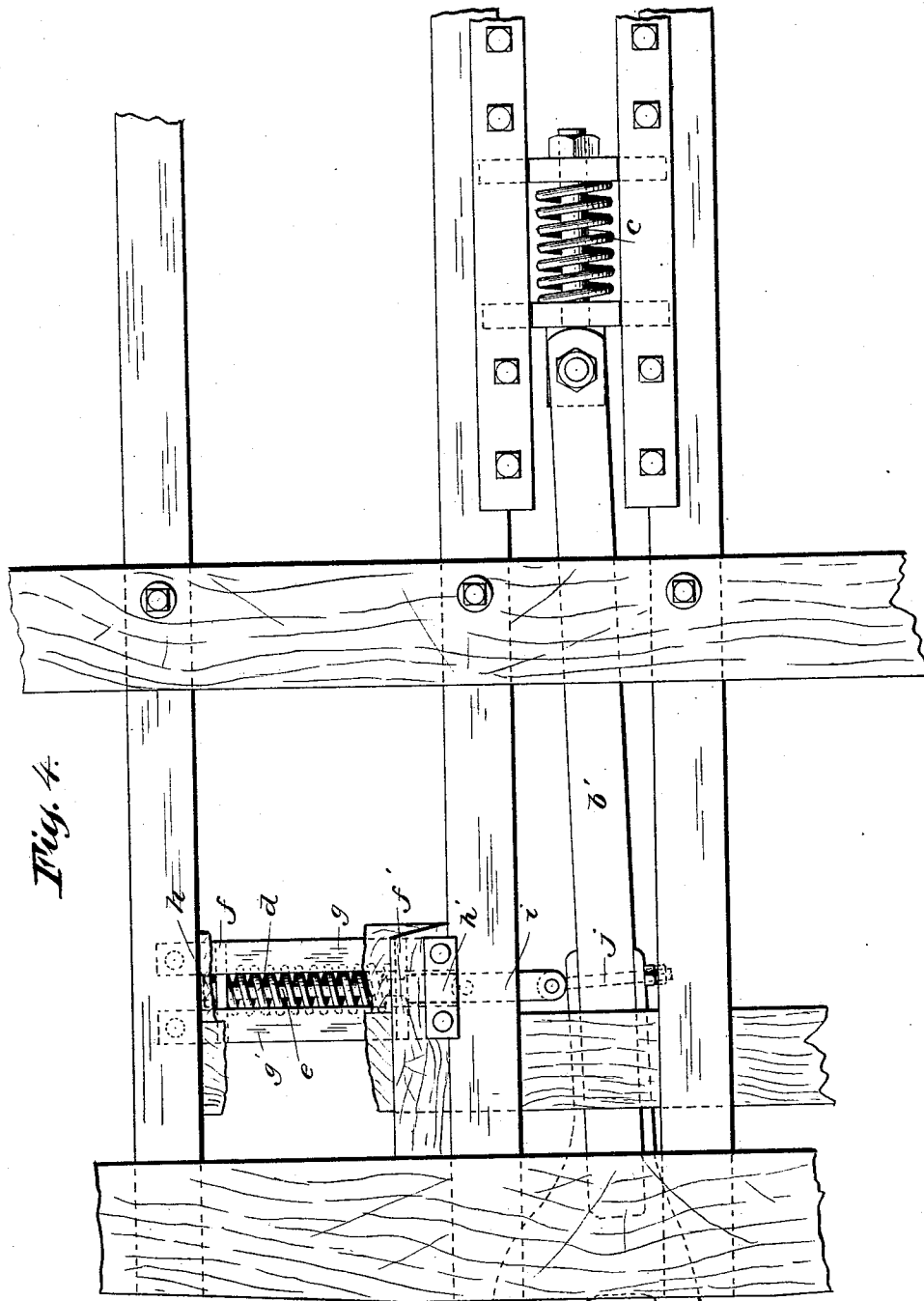


Fig. 4.

Witnesses:

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Inventor:

*James E. Sague*  
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# UNITED STATES PATENT OFFICE.

JAMES E. SAGUE, OF BROOKLYN, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 480,628, dated August 9, 1892.

Application filed October 14, 1891. Serial No. 408,689. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES E. SAGUE, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Car - Couplers, of which the following is a specification.

My invention relates to certain new and useful improvements in car-couplers, and particularly to that class in which twin jaws of the Gould or Janney type are employed. As at present constructed the carrier-iron or draw-head through which the coupler passes is narrow and limits the lateral movement of the coupler, so that it may be in locking relation with the coupler of the adjoining car. This construction is, however, very objectionable, especially when cars of different lengths are coupled together or when a car is coupled to a locomotive - tender. In rounding sharp curves or in passing from a curve to a straight section of track the car-platforms tend to move laterally to each other, and when capable of but limited lateral movement or when held rigidly central by the couplers, as in the usual construction, great strains are brought upon the couplers and carrier-irons, which are transmitted to the car body and trucks, increasing the wear and causing frequent breakage of couplers and carrier-irons, besides occasioning a pronounced danger of derailment where the curve is sharp.

It is the object, therefore, of my invention to obviate these difficulties and to produce a car-coupler which will be normally held in locking position and in which the lateral movement is much greater than at present; to which end my said invention consists in the details of construction and arrangement of parts, as hereinafter more fully specified, and pointed out in the claims.

In the drawings, in the several figures of which like parts are similarly designated, Figure 1 is a top plan view of my invention attached to a locomotive or tender. Fig. 2 is a section on the line  $xx$ , Fig. 1. Fig. 3 is a section on the line  $yy$ , Fig. 2; and Fig. 4 is a top plan view of my invention applied to an ordinary railway-car.

$a$  is the coupler passing through the carrier or draw-head  $b$  and attached to the usual draw-bar  $b'$ , which in the case of a locomotive or

tender may be simply pivoted to the bottom frame thereof, but which in the case of a passenger-coach, where greater comfort is sought, is pivoted to a spring  $c$  in the manner well known. The coupler is held in the desired position by means of a spring  $d$ , which, as shown, is coiled about the rod or shaft  $e$  and confined between two movable plates  $f$  and  $f'$ , which work upon the carrier-irons  $g$   $g'$ , secured to the bottom of the car at approximately right angles to the coupler, the plates being retained in the irons by a tongue or projection  $f^2$ . One end of the rod or shaft  $e$  is provided with a head  $h$ , impinging against the plate  $f$ , and the other end has a square or shouldered portion  $h'$ , impinging against the plate  $f'$ . To the square portion  $h'$  of the rod is pivotally connected the double link  $i$ , which is in turn secured to a bolt  $j$ , passing through a perforation in the draw-bar and firmly secured therein.

The operation of the device is obvious. If the coupler is moved to the right, for instance, the rod  $e$  by its connections is also moved in the same direction, carrying with it the plate  $f$ , and thereby compressing the spring  $d$  against the plate  $f'$ , resting against the ends of the carrier-irons, and when the strain is removed the spring exerts its tension and moves the coupler to its normal position. When the coupler is applied to a passenger-coach and the spring  $c$  is employed, the link  $i$  compensates for any forward and back movement of the draw-bar and coupler.

I do not desire to limit myself to the specific details of construction herein shown and described, as the device may be modified and changed materially without departing from the spirit and scope of my invention, and an arrangement may be readily devised by which the spring  $d$ , instead of being compressed by the lateral movement of the coupler, will be extended.

What I claim as new, and desire to secure by Letters Patent, is—

1. A rod attached to the car-coupler and projecting laterally between shouldered or flanged guides or carrier-irons and a spring coiled about said rod and confined between two movable plates working within the guides or carrier-irons, substantially as described.

2. The combination, with a car-coupler, of

a carrier-iron supporting the same and having a breadth sufficient to permit an extended lateral motion of said coupler in either direction and a lateral spring attached to the said  
5 coupler and tending to draw the same to its normal central position when forced to either side thereof, substantially as described.

3. The combination, with a car-coupler, of  
10 a carrier-iron supporting the same and having a breadth sufficient to permit an extended lateral motion of said coupler in either direction and a spring coiled about a rod attached to said coupler for the purpose of drawing the  
15 same to its normal central position and confined between movable plates mounted on said rod and working in guides provided with stops, substantially as described, for the purposes set forth.

4. Parallel shouldered guides beneath the  
20 car placed laterally to the car-coupler; two movable plates working in said guides, and a spring confined between said guides and coiled about a rod passing through the plates, said  
25 rod having a head or nut on its free end and a stop or shoulder on its inner end and at-

tached to the car-coupler to maintain the same in a central position, all combined and arranged to operate substantially as described.

5. A rod attached to the car-coupler through  
30 a link and having near one end a stop or shoulder and a head or nut at the opposite end, movable plates mounted on said rod and normally held against the head and shoulders  
35 thereof, respectively, by a spring coiled about said rod, and parallel shouldered guides in which the plates travel, substantially as described, for the purposes set forth.

6. In a device for retaining car-couplers in  
40 a coupling position, two movable plates working in parallel shouldered guides or carrier-irons and each provided with a depending finger of a size to enter and fit the space between  
45 the parallel guides, substantially as described.

Signed at New York city, in the county of  
New York and State of New York, this 19th  
day of September, A. D. 1891.

JAMES E. SAGUE.

Witnesses:

J. B. SABINE,

ALBERT SCHIFFERS.