

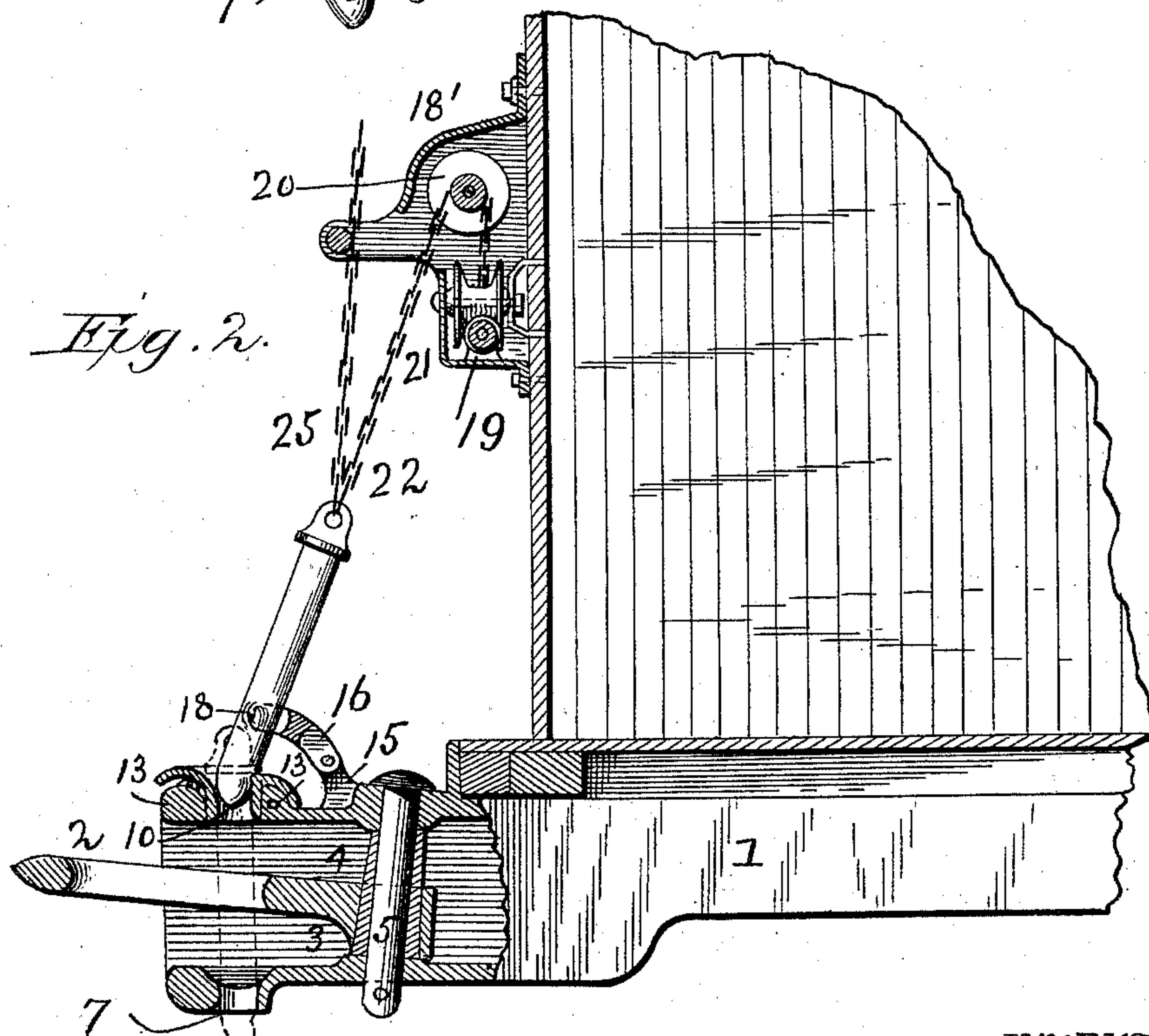
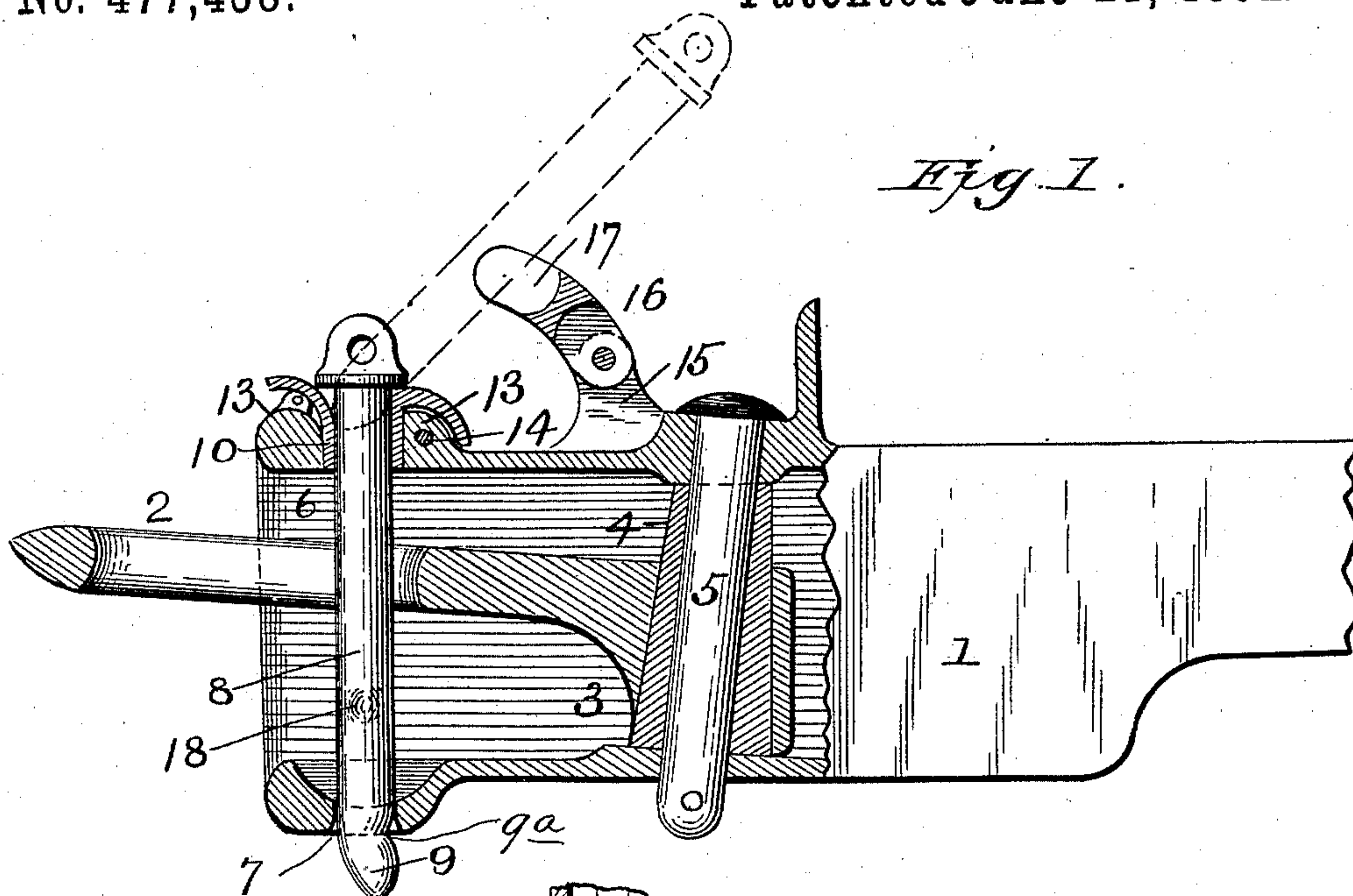
(No Model.)

2 Sheets—Sheet 1.

J. W. MCGILL.  
CAR COUPLING.

No. 477,438.

Patented June 21, 1892.



**WITNESSES:**

*F. L. Osgood*  
*Amos A. Phelps*

*INVENTOR:*

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James Wilson McGill,  
by Louis Sagger & Co.  
Attorneys.

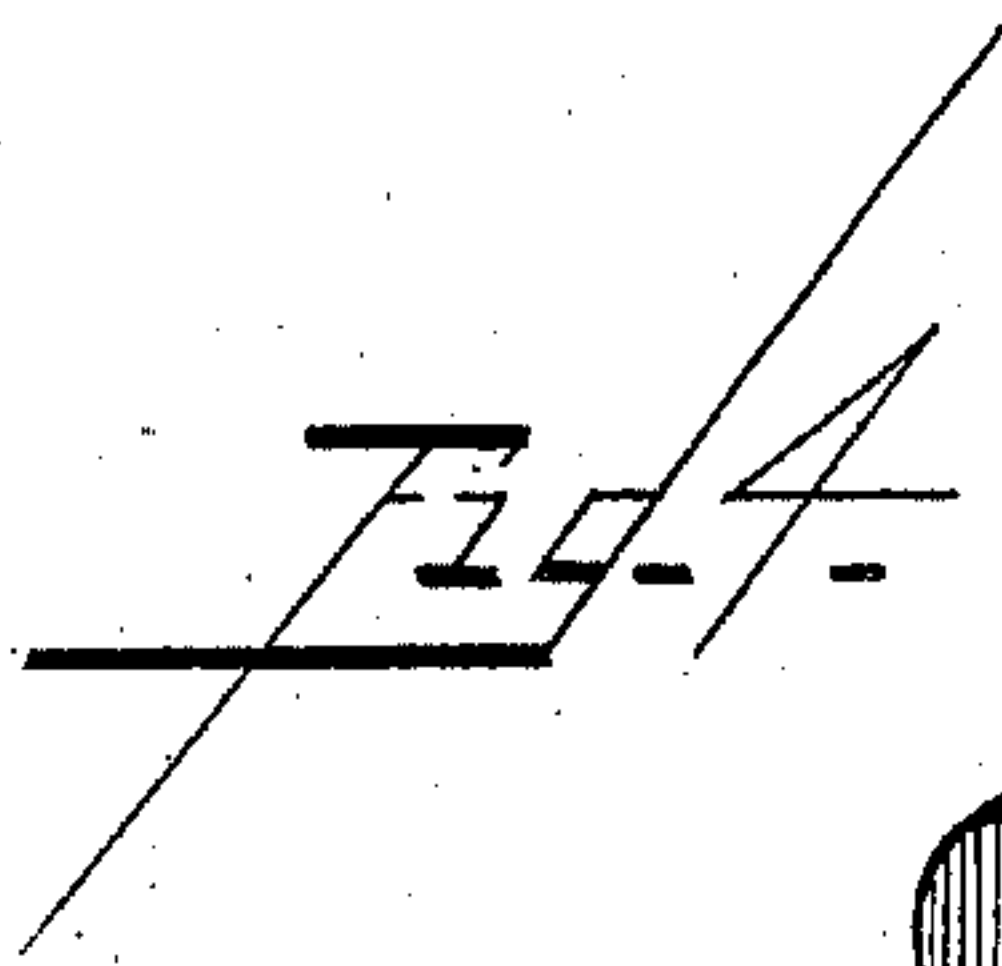
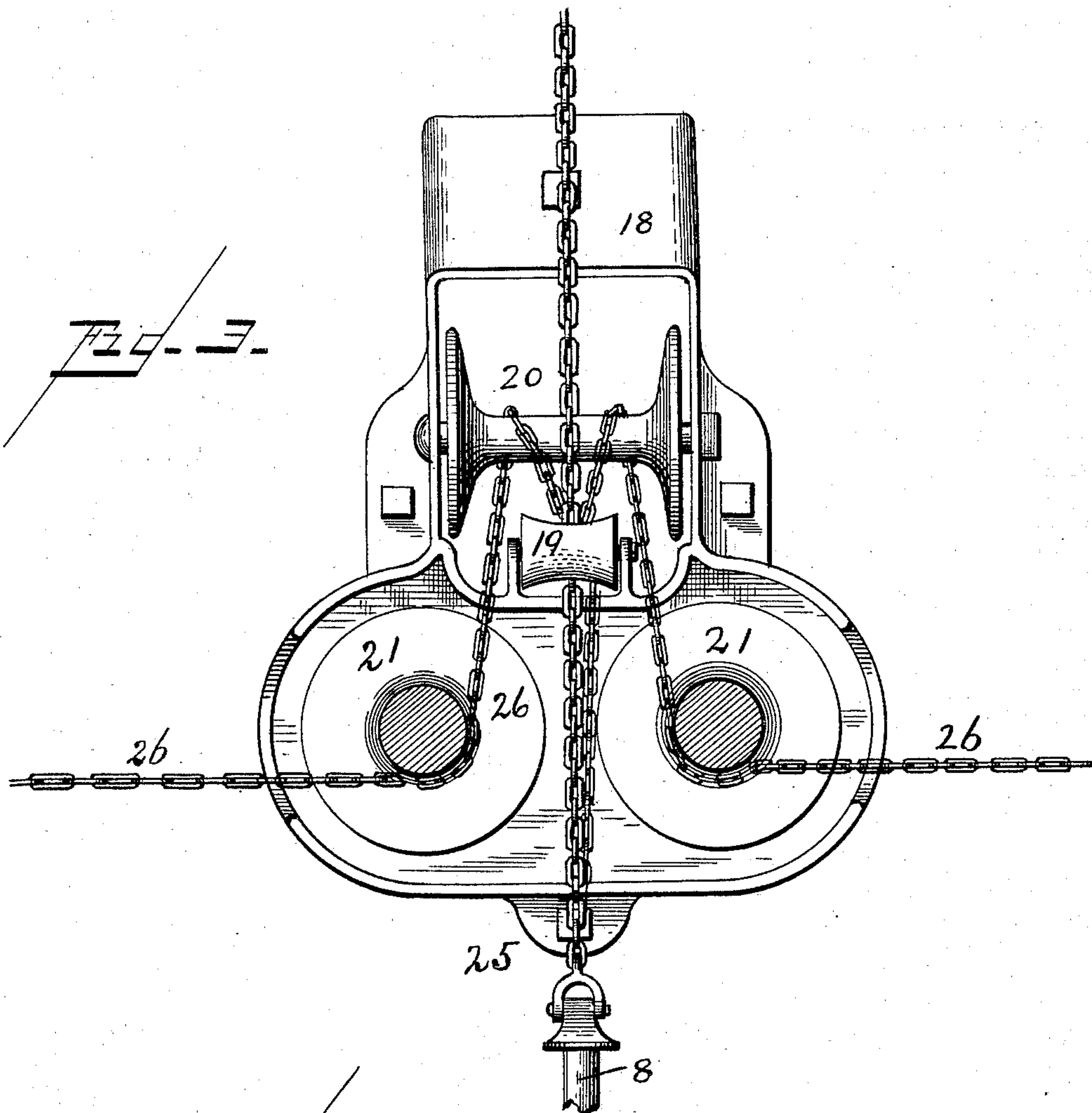
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2 Sheets—Sheet 2.

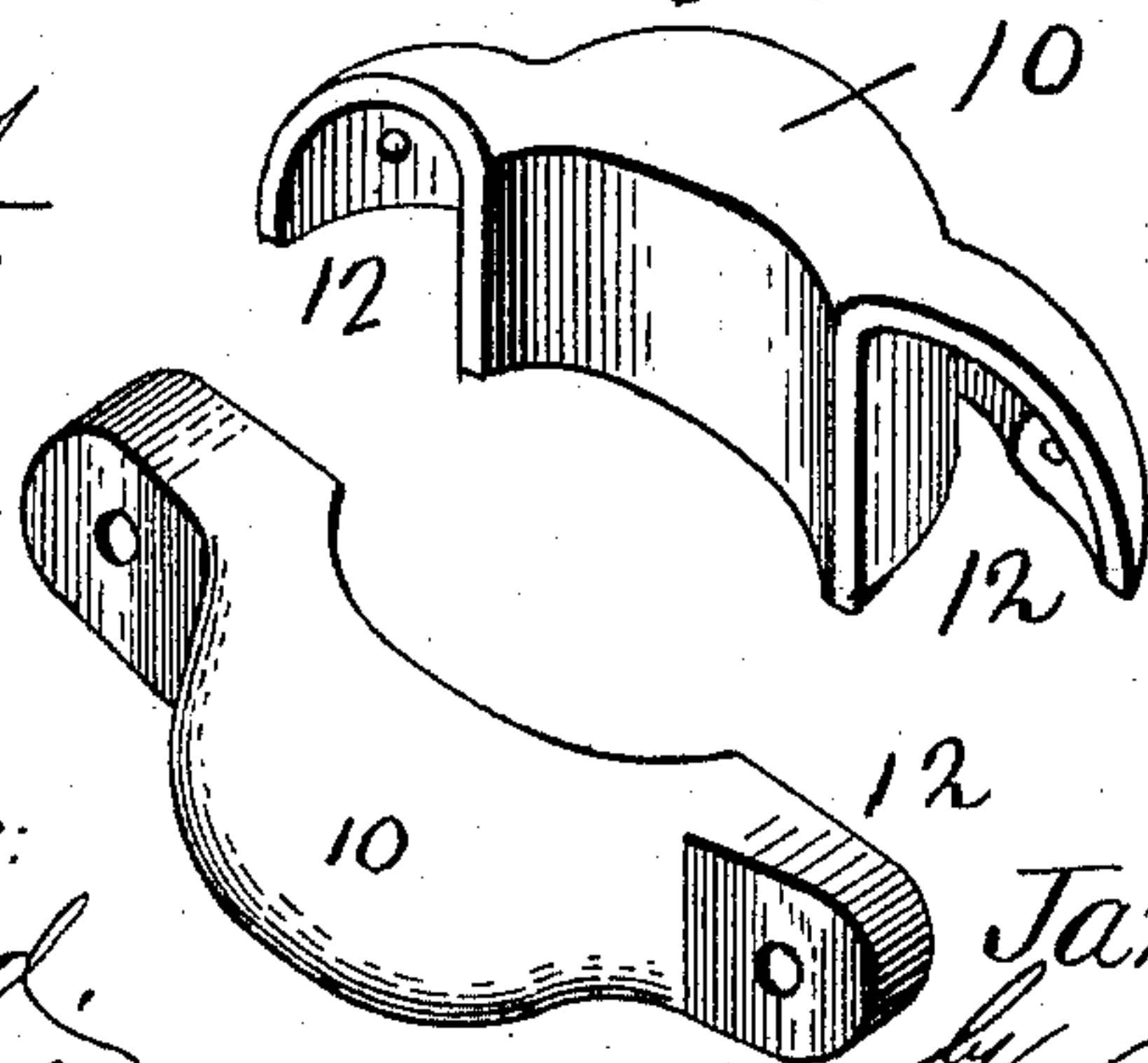
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# UNITED STATES PATENT OFFICE.

JAMES WILSON MCGILL, OF PEORIA, ILLINOIS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 477,438, dated June 21, 1892.

Application filed August 29, 1891. Serial No. 404,152. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES WILSON MCGILL, a citizen of the United States, and a resident of Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in car-couplers, the object being to provide an improved construction of same whereby superior advantages are obtained with respect to simplicity of construction and efficiency in operation.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a sectional view of a car-coupler constructed in accordance with my invention. Fig. 2 is a similar view showing the same applied to a box-car. Fig. 3 is a front view of the device shown in Fig. 2. Fig. 4 is a detail view of the lugs secured to the upper side of the draw-head, which embrace the coupling-pin and prevent it from being withdrawn.

In the said drawings, the reference-numeral 1 designates the draw-head, and 2 the coupling-link, having a boss 3 at its inner end, formed with a tapering aperture to receive a correspondingly-tapered sleeve 4, through which passes the inclined pin or bolt 5. The object of this construction is to allow the coupling-link to have a vertical movement, so as to engage with cars of different heights, and also to keep its outer end elevated, preventing sagging or drooping of the same and insuring that it will be properly presented to an approaching draw-bar.

In the front end of the draw-bar are two aligned holes or apertures 6 and 7 for the passage of the coupling-pin 8, having an enlarged bottom end 9 and a recess 9<sup>a</sup>. The inner face of the lower aperture 7 is dished or concaved, so as to form a guide for the coupling-pin. Fitting within the upper aperture 6 is a sleeve 10, which embraces the coupling-pin. This

sleeve is made in two parts without outwardly-projecting recessed lugs 12, provided with registering bolt-holes and fitting over corresponding apertures 13, formed with the draw-head and provided with bolt-holes registering with the bolt-holes in the lugs. Bolts 14 pass through these holes and securely hold the sleeve in place.

Pivoted to a lug 15 on the upper rear end of the draw-head is a pin-holder 16, having a bifurcated end 17, with which engages recesses or depressions 18 on the coupling-pin.

The operation will be readily understood. The coupling-pin is elevated till its enlarged lower end comes in contact with the sleeve 10, which prevents its withdrawal, so that there is no danger of its ever becoming lost or misplaced. As the cars come together the pin is dropped through the link, and its lower end, striking the concaved or dished upper end of aperture 7, will be guided therein, the recess 9<sup>a</sup> engaging with the rear wall of said aperture. In case the pin becomes broken the sleeve 10 can be removed and a new one inserted, when the sleeve is again secured to the draw-head, so as to prevent the withdrawal of the pin.

When it is desired to hold the pin in an elevated position, so that the jar of the cars will not cause the same to fall and couple, as when on a side track and not in use, the bifurcated end of the pin-coupler is engaged with the recesses 18 in the coupling-pin, which will retain it in the elevated position.

In Figs. 2 and 3 I have shown the invention applied to a box-car. In this case a housing 18 is secured to the car intermediate of its top and bottom, provided with a pulley 19, a pulley 20, and two side pulleys 21 21. Connected with the coupling-pin is a chain 22, which passes up through apertures in the housing and bears against the pulley 19. This chain, which may be provided with a hand-hold, extends to the top of the car. There is also connected with the coupling-pin a chain 25, which is connected with chains 26 26, passing over pulley 20 and extending outwardly over the pulleys 21 21 to the sides of the car. Said chains, which extend to the sides of the car, may be provided with hand-holds. By pulling upon either of these chains 22 or 26 26 the coupling-pin can be elevated.



Having thus described my invention, what I claim is—

5 1. In a car-coupler, the combination, with the draw-bar having aligned upper and lower apertures, the latter being formed with a concaved inner face, the sleeve fitting in the upper aperture, and the coupling-link, of the coupling-pin having an enlarged lower end, substantially as and for the purpose described.

10 2. In a car-coupler, the combination, with the draw-bar having aligned upper and lower apertures, the sleeve made in two parts and fitting in the upper aperture, and the link having the boss provided with a tapering aperture, with tapering sleeve fitting therein, and the inclined pin passing through said sleeve, of the coupling-pin having an enlarged lower end and recesses intermediate

of its end and the pivoted pin-holder, substantially as described.

20 3. In a car-coupler, the combination, with the draw-bar having aligned apertures, the sleeve fitting in one of said apertures, and the coupling-link, of the coupling-pin having enlarged lower end, the housing secured to the car, provided with pulleys, and the chains connected with said pulleys, substantially as described.

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

JAMES WILSON MCGILL.

Witnesses:

H. S. MILLER,

W. H. ANDERSON.