

(No Model.)

2 Sheets—Sheet 1.

F. TIEMANN.  
CAR COUPLING.

No. 502,505.

Patented Aug. 1, 1893.

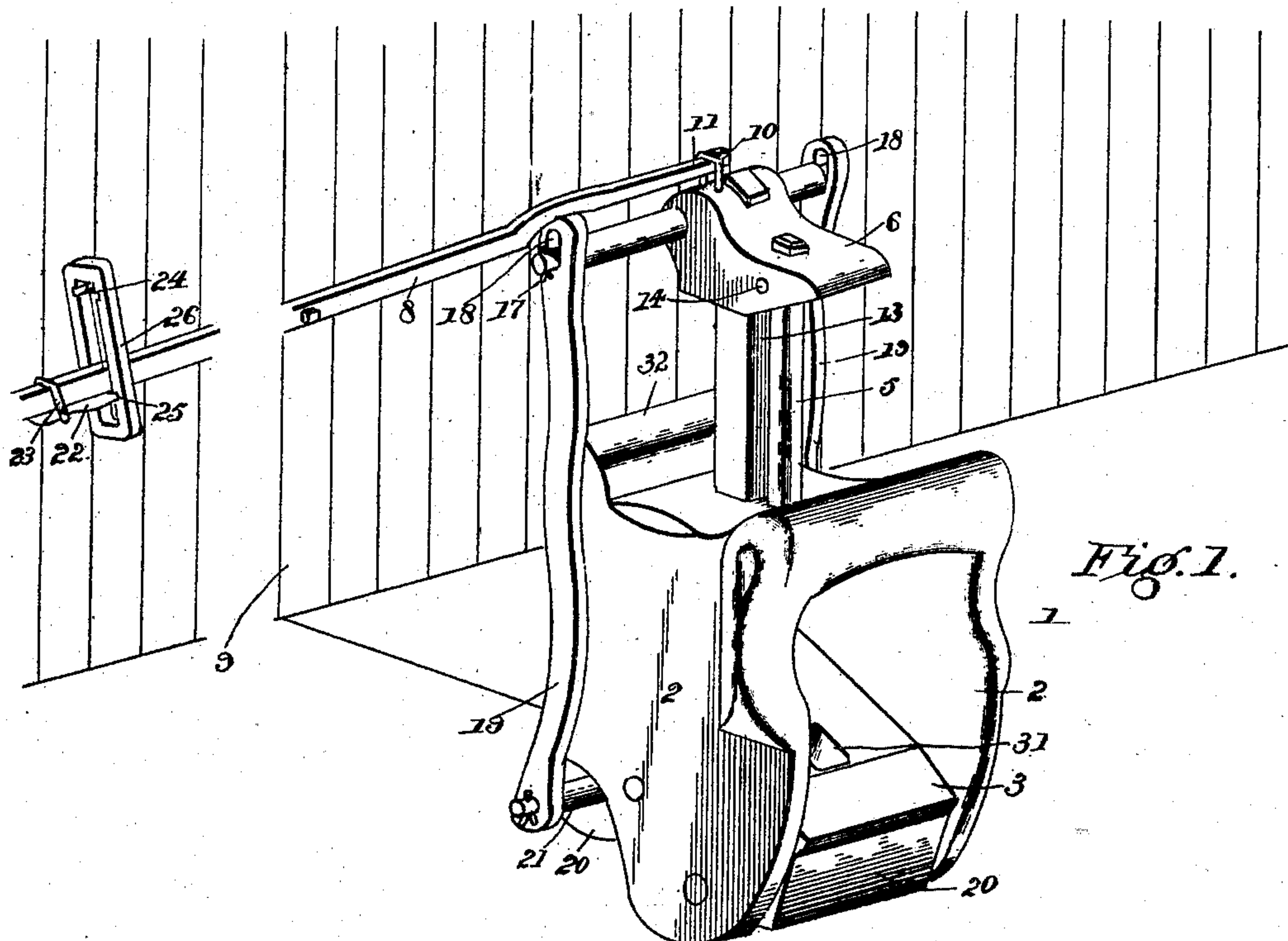


Fig. 1.

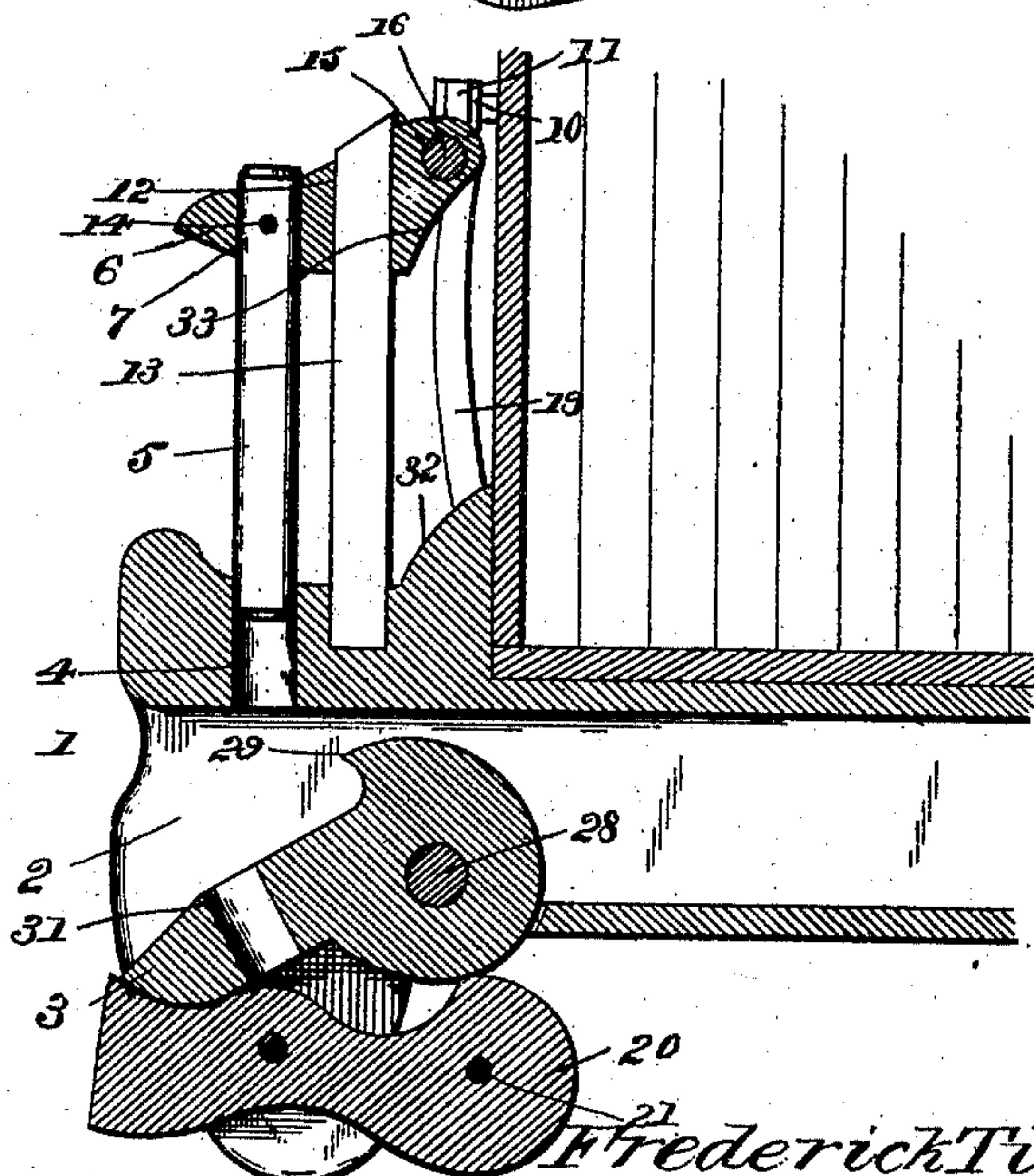


Fig. 3.

Witnesses

*J. M. Johnson*  
*A. J. Riley*

Inventor

*Frederick Tiemann*

By *his* Attorneys,

*C. A. Snow & Co.*

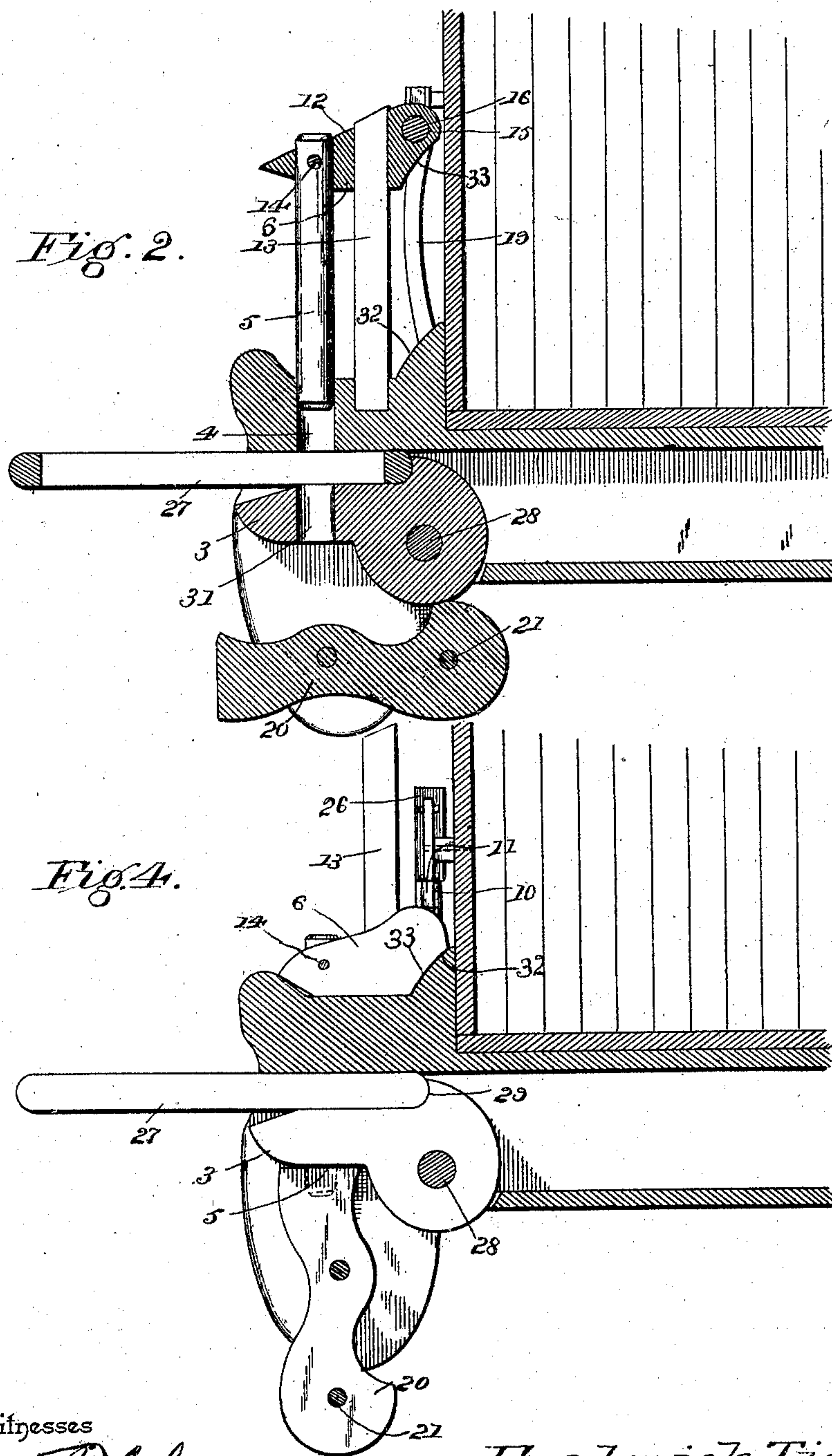
(No Model.)

2 Sheets—Sheet 2.

F. TIEMANN.  
CAR COUPLING.

No. 502,505.

Patented Aug. 1, 1893.



Witnesses

F. M. Johnson.  
J. H. Riley

# Inventor

*Frederick Tiemann*  
By his Attorneys,

Chas. Snow & Co.



# UNITED STATES PATENT OFFICE.

FREDERICK TIEMANN, OF RICE, MINNESOTA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 502,505, dated August 1, 1893.

Application filed April 24, 1893. Serial No. 471,616. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK TIEMANN, a citizen of the United States, residing at Rice, in the county of Benton and State of Minnesota, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car couplings.

10 The object of the present invention is to improve the construction of car couplings, and to provide one which may be readily coupled and uncoupled without going between the cars.

15 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.

20 In the drawings—Figure 1 is a perspective view of a car coupling constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view, showing a link clamped within the draw-head preparatory to dropping the coupling pin. Fig. 3 is a similar view showing the position of the parts preparatory to coupling. Fig. 4 is a similar view showing the position of the parts when coupled.

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

1 designates a draw-head consisting of a top portion and depending sides 2, forming a bottomless link opening or cavity in which is pivotally mounted a link clamp 3. The draw-head is provided with a coupling pin perforation 4, in which is arranged a coupling pin 5, pivoted to a block 6, in an opening 7 thereof, and adapted to be held elevated preparatory to coupling by a lever 8, extending from the draw-head to one side of a car 9 and fulcrumed thereon to enable the car coupling to be operated without going between cars. The block is provided with an eye 10 to receive the inner end 11 of the operating lever 8, which is recessed to engage said eye; and it is provided with a vertical opening 12, which receives a vertical guide-bar 13 rising from the top of the draw-head in rear of the coupling pin perforation. The upper end of the

coupling pin is secured by a transverse pin 14 to the block 6; and the rear end of the latter is provided with a transverse opening 15 receiving a transverse pivot 16 which has its ends reduced and secured by keys 17 in openings 18 of the upper ends of link bars 19. The link bars 19 are arranged at the sides of the draw-head and extend above and below the same, their upper ends being connected with the coupling pin by the block 6, and their lower ends being connected with a swinging weight 20 to cause the coupling pin to descend to engage a link when the block is released by the operating lever.

The swinging weight 20 is journaled intermediate of its ends between the lower ends of the sides of the draw-head, and it is connected by a transverse rod 21 with the lower ends of the link bars 19. The transverse rod 21 is located intermediate of the ends of the swinging weight 20, and has its ends reduced and secured by keys to the link bars.

The outer end of the operating lever is depressed when it is desired to raise the coupling pin preparatory to coupling; and it is provided with a sliding latch 22, which is connected by a link 23 with the operating lever, and which is adapted to engage upper and lower notches 24 and 25 of a guide or keeper 26 receiving the outer end of the operating lever. While the coupling pin is in an elevated position the link 27 enters the draw-head, and in order to prevent the link leaving the draw-head by being accidentally thrown or jarred therefrom, the pivoted clamp 3 is provided. The clamp 3 is pivoted at its rear end by a transverse pin 28, and has the upper portion of its rear end curved upward at 29 and arranged to be engaged by the link when the latter enters the draw-head, whereby the clamp is turned on the pivot 28 moving its outer portion upward and securely holding the link in the draw-head. The coupling pin may then be lowered by means of the operating lever by hand, thereby making the operation of coupling and uncoupling as positive and reliable as though it were performed solely by hand, and at the same time obviating the necessity of going between cars.

Changes in the form, proportion and the minor details of construction may be resorted



to without departing from the principle or sacrificing any of the advantages of this invention.

5 The link clamp is provided near its front end with a coupling pin perforation 31; and the flange 32 on the top of the draw-head has its front face beveled similarly to the rear face 33 of the block 6; and when the latter is down it rests snugly on the draw-head.

10 What I claim is—

1. In a car coupling, the combination of a draw-head, a coupling pin, means for holding a coupling pin elevated, and a pivoted clamp mounted in the draw-head and having its rear 15 portion extended upward and adapted to be engaged by a link, whereby the clamp is turned on its pivot and is caused to clamp the link, substantially as described.

2. In a car coupling, the combination of a 20 draw-head, a swinging weight mounted beneath the draw-head, link bars arranged at the sides of the draw-head and having their lower ends connected with the weight, a block connected with the upper ends of the link bars, 25 a coupling pin secured to the block, and a lever for raising the coupling pin, substantially as described.

3. The combination of a draw-head provided on its upper face with an upwardly extending guide bar, a block slidingly mounted on 30 the guide-bar, a coupling pin secured to the block and carried thereby, a swinging weight

connected with the block, and an operating lever connected with the block, substantially as described. 35

4. The combination of a draw-head provided with depending sides, a pivoted link clamp mounted in the draw-head, a swinging weight journaled between the lower ends of the sides, a guide bar extending upward from the draw-head, a sliding block mounted on the guide-bar, a coupling pin secured to the block, link bars connecting the block with the swinging weight, and means for raising the block, substantially as described. 40 45

5. The combination of a draw-head, a swinging weight mounted beneath the same, a block connected with the weight and provided with an eye, a coupling pin secured to the block, an operating lever fulcrumed between its 50 ends, and provided at its inner end with a recess engaging the eye of the block, and provided at its outer end with a sliding latch, and a keeper receiving the outer end of the operating lever and provided with upper and 55 lower notches to be engaged by said latch, 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.

FRED TIEMANN.

Witnesses:

JOHN LAMPERT,

JOSEPH ZOWINMINER.