

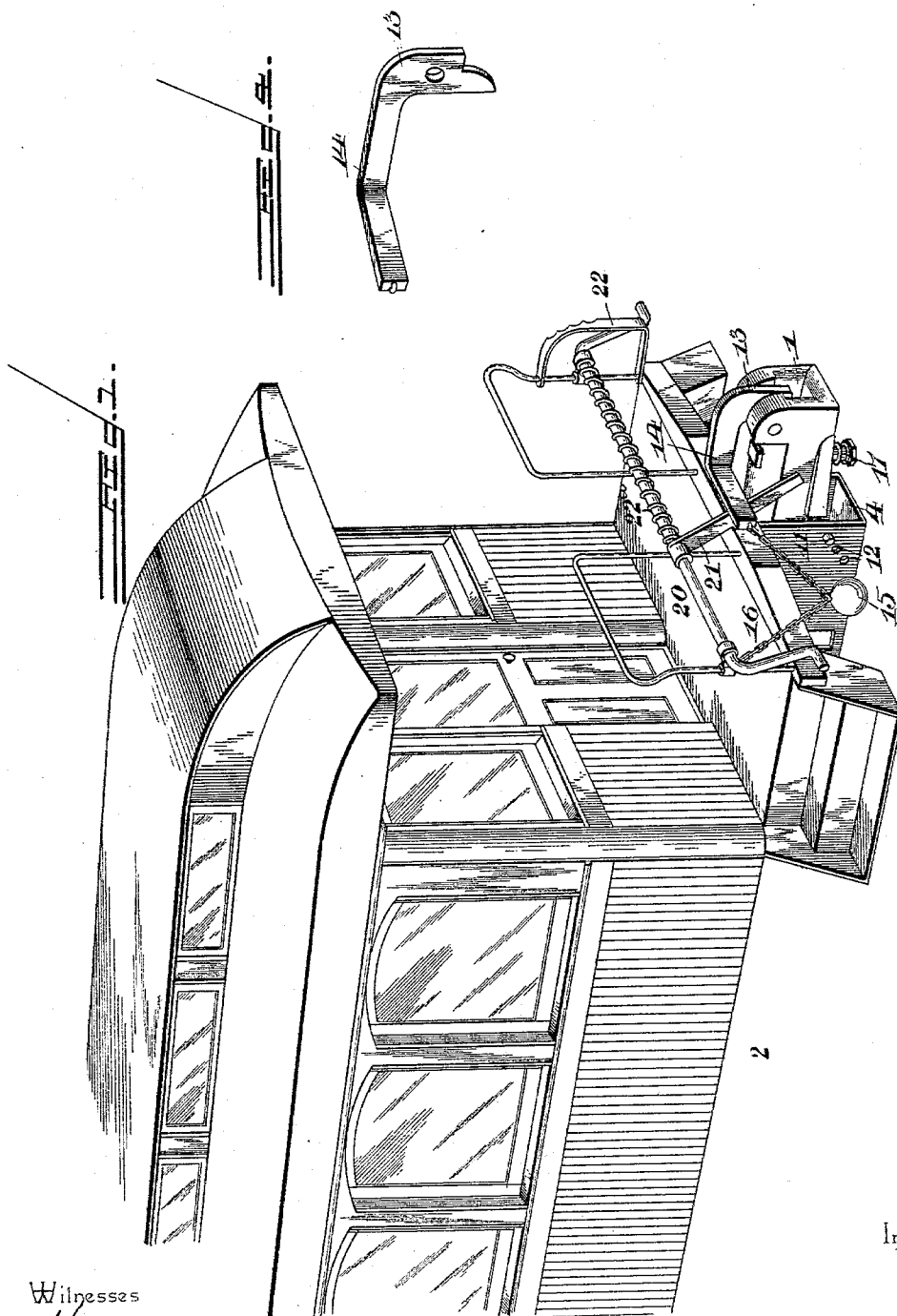
(No Model.)

2 Sheets—Sheet 1.

J. FARLOW.
CAR COUPLING.

No. 566,749.

Patented Sept. 1, 1896.



Inventor

Witnesses

H. T. Doyle
H. J. Riley

By *W. S. Attorneys,*

James Farlow,

C. A. Snow & Co.

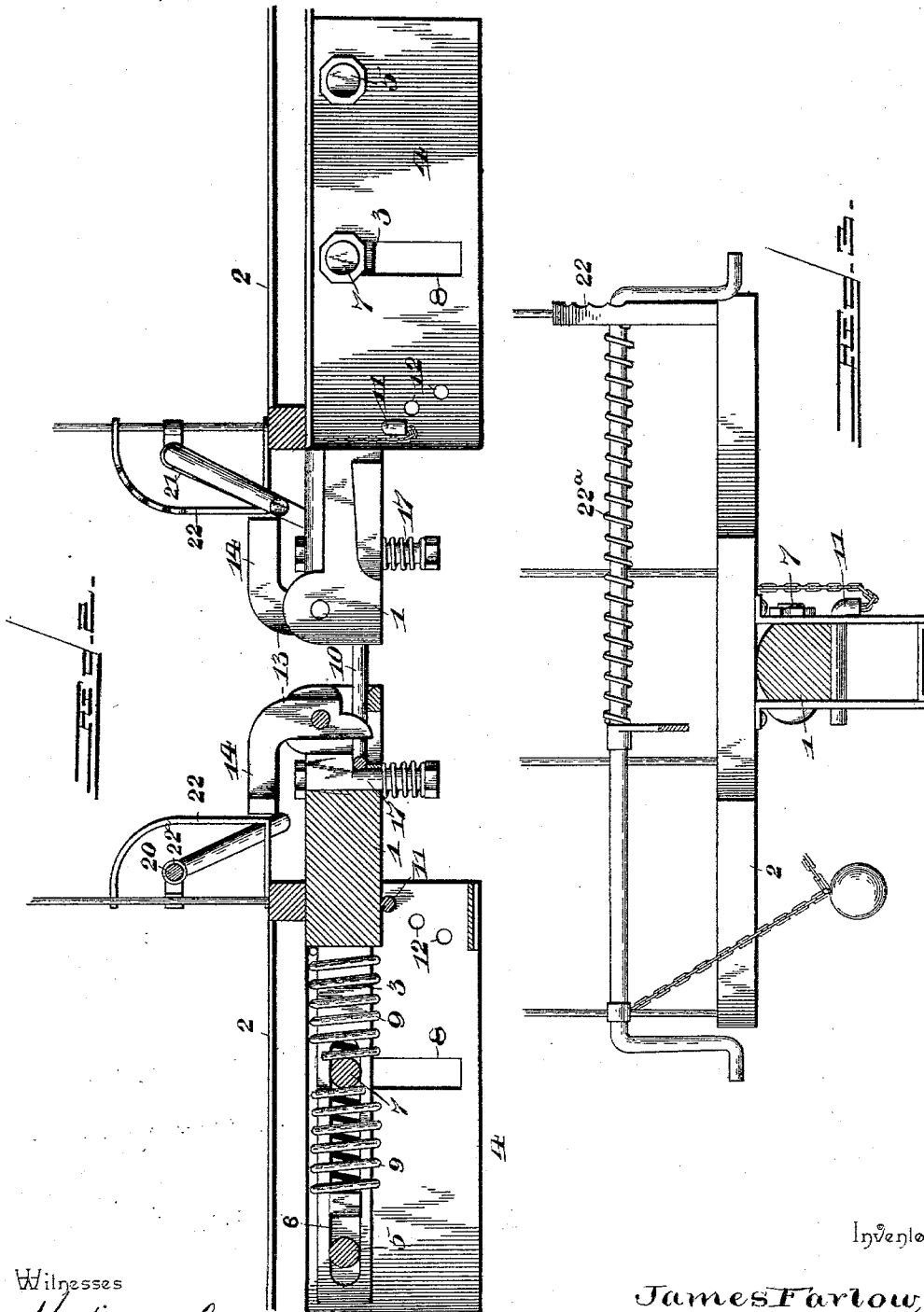
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By *his* Attorneys,

James Farlow,

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES FARLOW, OF GREENCASTLE, INDIANA, ASSIGNOR OF ONE-HALF TO
JACK SIMPSON, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 566,749, dated September 1, 1896.

Application filed January 31, 1896. Serial No. 577,574. (No model.)

To all whom it may concern:

Be it known that I, JAMES FARLOW, a citizen of the United States, residing at Greencastle, in the county of Putnam and State of Indiana, 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 to enable the same to be coupled automatically and to permit cars to be uncoupled without going between them.

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 two draw-heads coupled. Fig. 3 is a transverse sectional view. Fig. 4 is a detail view of the pivoted catch.

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

30 1 designates a draw-head mounted on a car 2 and having its draw-bar 3 arranged within a suitable support or frame 4 of the car. The draw-head is pivoted at its inner end to the frame 4 by a transverse fastening device 5. 35 It is capable of vertical adjustment to raise and lower the draw-head, and it is provided with a longitudinal opening 6, in which is arranged the said fastening device 5 and a fastening device 7. The fastening device 7 is 40 arranged in vertical slots or openings 8 of the sides of the frame or support 4, and spiral springs 9 are disposed on the draw-bar in advance and in rear of the fastening device 7, whereby the draw-head is cushioned in its inward and outward movement.

45 The draw-head is secured at any desired vertical adjustment for properly guiding a link 10 into another draw-head by a removable transverse pin 11, adapted to be arranged 50 in any one of a series of perforations 12 of the frame or support 4, and preferably con-

nected with the car by a chain. The perforations 12 are arranged at the front or outer end of the frame or support 4, and are disposed at different elevations to receive the 55 removable pin 11, upon which the draw-head is supported.

The draw-head is provided with a longitudinal link-opening, and the link 10 is engaged by a catch 13, pivoted at the top of the draw-head in a slot or opening thereof by a transverse pin. The catch is provided above the 60 draw-head with an inwardly-disposed substantially L-shaped extension 14, and a weight 15 is connected with the outer extremity of the extension by means of a chain 16. One 65 end of the chain is secured to the car and the other end to the extension of the catch. The weight is located at an intermediate point and is adapted to hold the catch in engagement with the link. When the link enters 70 the draw-head, it is capable of lifting the catch and passing the same, and the coupling is automatic. It is held in a horizontal position for guiding it into the mouth of a 75 draw-head by a vertical rod 17, arranged in a perforation of the draw-head and provided with a shoulder 18 for engaging the upper face of the link. A spiral spring is disposed 80 on the lower portion of the rod 17, and is interposed between the lower face of the draw-head and a flange or head of the rod. The upper end of the rod is provided with a nut, or other suitable head, which rests upon the upper face of the draw-head and limits the 85 downward movement of the rod.

The operation of uncoupling is performed from the sides of the car by a transverse rock-shaft 20, journaled in suitable bearings, provided at its ends with handles and having at 90 an intermediate point an arm 21, arranged to engage the laterally-disposed portion of the L-shaped extension of the catch and adapted to lift the same to swing the catch rearward out of engagement with the link. A curved 95 ratchet 22 is mounted on the car adjacent to one of the bearings of the rock-shaft, and is adapted to be engaged by the adjacent handle of the rock-shaft, which is capable of a limited longitudinal movement to enable its handle 100 to be engaged with and disengaged from the ratchet. The handle is maintained in engage-

ment with the ratchet by a spiral spring 22, disposed on the rock-shaft and interposed between the arm 21 and the bar which is arranged contiguous to the ratchet. Any suitable means may be provided for enabling the operation of uncoupling to be performed from the top of a box-car.

It will be seen that the car-coupling is exceedingly simple and inexpensive in construction, that it is capable of automatically coupling, and that it is adapted to be readily uncoupled without going between the cars. It will also be seen that simple and efficient means are provided for holding a link in a horizontal position for guiding it into the mouth of a draw-head, and that the draw-head is capable of vertical adjustment to enable two draw-heads to be arranged in the same horizontal plane.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a car-coupling, the combination with a car, of a draw-head, a pivoted catch mounted on the draw-head and provided at its top with an extension projecting laterally from the draw-head, a rock-shaft journaled on the car and having an arm arranged to engage and lift the extension of the catch, and a weight provided with a chain connected with the car and with the extension of the catch, substantially as and for the purpose described.
2. In a car-coupling, the combination with a car, of a draw-head, a pivoted catch mounted on the draw-head and having an extension at its top, a rock-shaft journaled on the car, capable of limited longitudinal movement and provided with a handle and with an arm arranged to engage the extension of the catch, a ratchet mounted on the car in position to

be engaged by the arm of the rock-shaft, and a spring for holding the handle of the rock-shaft in engagement with the ratchet, substantially as and for the purpose described.

3. In a car-coupling, the combination with a car, of a draw-head, a catch pivotally mounted on the draw-head and provided at its top with an extension, a spring-actuated rod mounted on the draw-head and having a shoulder for engaging a link, a rock-shaft journaled on the car and provided with an arm for engaging the extension of the catch and capable of a limited longitudinal movement, a ratchet mounted on the car in position to be engaged by the rock-shaft, and a spiral spring disposed on the rock-shaft and holding the same in engagement with the ratchet, substantially as described.

4. In a car-coupling, the combination with a car, of a frame or support mounted thereon and provided at its sides with vertical openings and having a series of perforations, a draw-head having a draw-bar provided with a longitudinal opening, fastening devices arranged in the longitudinal opening of the draw-bar and passing through the sides of the frame or support, one of the fastening devices forming a pivot, and the other being arranged in the openings of the sides of the frame or support, springs for cushioning the draw-head, and a removable pin arranged in one of the perforations of the frame or support and adjustably supporting the draw-head substantially as and for the purpose described.

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

JAMES FARLOW.

Witnesses:

JACK SIMPSON,
M. D. BRIDGES.