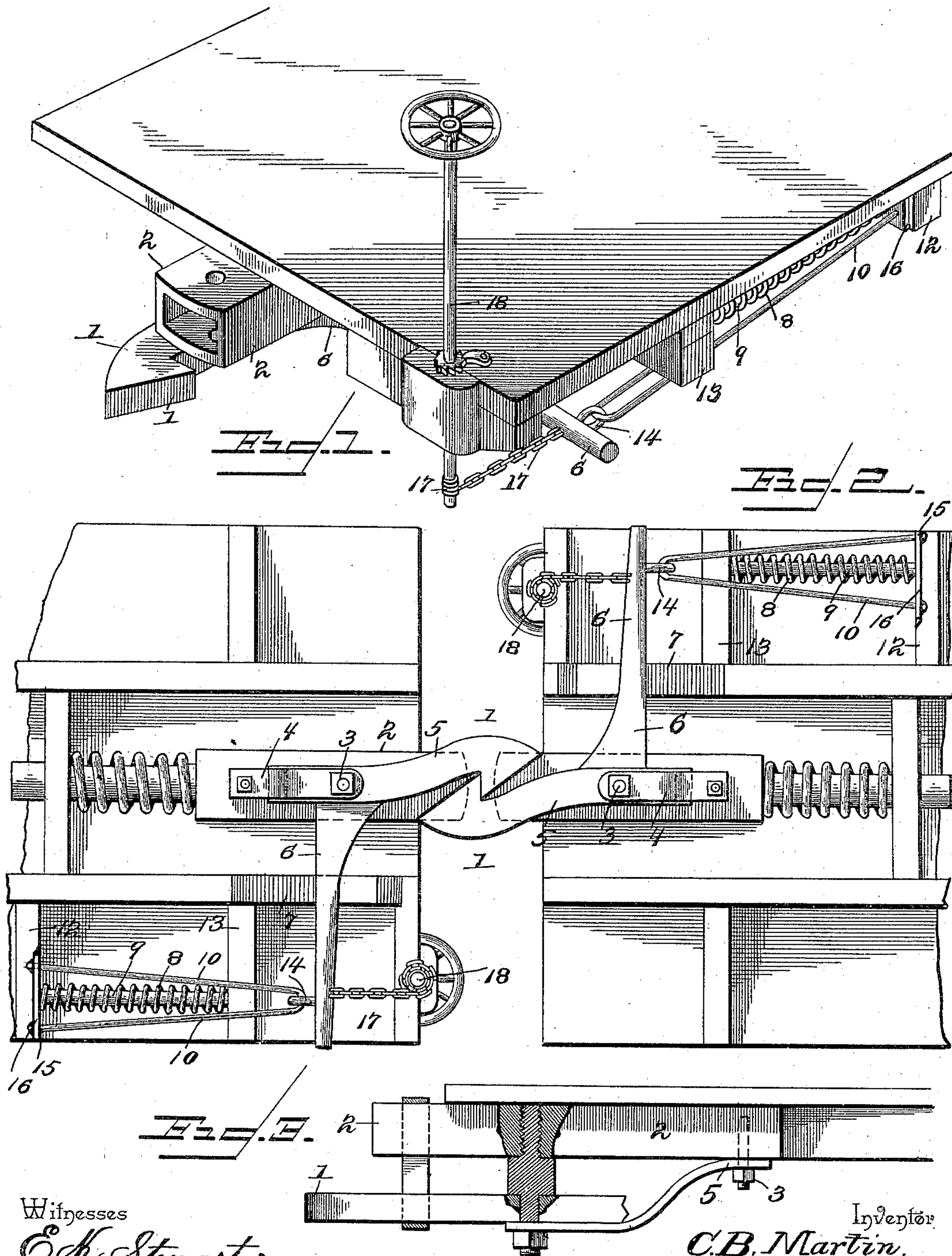


(No Model.)

C. B. MARTIN.
CAR COUPLING.

No. 488,339.

Patented Dec. 20, 1892.



Witnesses

E. H. Stewart
N. H. Riley

By *his* Attorneys,

C. B. Martin

Inventor

UNITED STATES PATENT OFFICE.

CHARLES B. MARTIN, OF WAUPUN, WISCONSIN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 488,339, dated December 20, 1892.

Application filed October 27, 1892. Serial No. 450,120. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. MARTIN, a citizen of the United States, residing at Waupun, in the county of Dodge and State of Wisconsin, 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 a simple and effective one adapted to couple automatically, and capable of being readily uncoupled without necessitating a brakeman going between 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 embodying the invention. Fig. 2 is a reverse plan view showing two cars coupled. Fig. 3 is a detail side elevation showing a coupling hook arranged at a different elevation from that of the preceding figure.

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

30 1 designates a coupling hook which is pivoted to the lower face of an ordinary form of draw-head 2 which is adapted to be employed in connection with a car having the ordinary pin and link coupling. The coupling or draw-hook 1 is pivoted by a pin 3 and is supported by a bracket plate 4 extending forward and arranged beneath the shank of the hook 1. The neck 5 of the hook back of the shoulder 40 is curved to form sufficient space back of the shoulder to permit two draw-hooks when coupled to have much lateral or side motion without side pressure, thereby obtaining an elastic joint or connection so indispensable in a car coupling. A horizontal arm 6 extends 45 laterally from the shank of the hook at one side thereof, and is normally held against the shoulder 7 of the car to maintain the hook in proper position for coupling, by a spiral spring 8 which is disposed on a round guide bar 9, and which is connected by side rods 10 of a U-shaped connecting piece 11 with the arm

6. The round guide bar 9 is arranged longitudinally of the car and is supported by transverse pieces 12 and 13; and the U-shaped 55 connecting piece 11 engages at its bend an eye 14 of the arm 6, and has the inner ends of its sides secured in perforations 15 of a sliding plate 16 which is provided with a central opening to receive the guide-bar. The plate bears against the inner ends of the springs and provides an equal bearing and prevents the spring being cramped or binding against the guide-bar. The outer end of the arm 6 is connected by a chain 17 with a 65 vertical shaft 18, which is journaled in suitable bearings at one side of the car, and is provided at its upper end with a hand wheel. The spring holds the hook in engagement, when the cars are coupled, with a similar 70 hook of another car, and the hook may be swung horizontally for uncoupling by the shaft. The shaft of one car is arranged at one side, and that of the other car is at the opposite side, so that the operation of uncoupling may be performed at either side of the cars, also by hand from the ground.

It will be seen that the car coupling is simple and inexpensive in construction, and strong and durable, that it is adapted to 80 couple automatically, and that it may be readily uncoupled from either side without necessitating a brakeman going between cars.

In Fig. 3 of the accompanying drawings is illustrated a form of coupling in which the 85 coupling hook is disposed some distance below the draw-bar, the pivot of the coupling hook being provided with shoulders which are interposed between the coupling hook and the draw-bar.

90 What I claim is—

1. In a car coupling, the combination with a car having an ordinary draw-head, of a hook pivoted to the lower face of the draw-head, and having a curved neck, a bracket plate 95 arranged in rear of the hook and extending forward beneath the shank of the hook and receiving the pivot thereof and supporting the hook, and a spring for holding the hook coupled, substantially as described.

100 2. In a car coupling, the combination with a car having a draw-head, a hook pivoted to the lower face of the draw-head and having a laterally extending arm provided at the

outer end with an eye, a longitudinally disposed guide-bar mounted on the car, a spiral spring disposed on the guide bar, a plate arranged on the guide-bar at the inner end thereof and having an opening to receive the same and engaging the inner end of the spring, and a U-shaped connecting piece engaging the eye of the arm and having its ends secured to the plate, substantially as described.

3. In a car coupling, the combination of a car provided with a shoulder and having a draw-head, a hook pivotally mounted on the lower face of the draw-head and having a laterally extending arm provided at its outer end with an eye and bearing against said shoulder, a longitudinally disposed guide-bar

mounted on the car, a spiral spring arranged on the guide-bar, a plate having an opening receiving the guide bar and extending from opposite sides thereof, a U-shaped connecting piece receiving the eye of the arm in its bend and having the ends of its sides secured to said plate, a vertical shaft mounted on the car and a chain connecting the lower end of the shaft with said arm, 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.

CHARLES B. MARTIN.

Witnesses:

E. D. DONEY,
R. S. SARGENT.